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THE BLACK JOURNEY



*The shores of Lake Nyasa
near Langenburg*

THE BLACK JOURNEY

Across Central Africa with
the Citroën Expedition

by

GEORGES-MARIE HAARDT

and

LOUIS AUDOUIN-DUBREUIL

Profusely Illustrated



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FOREWORD

THIS book is the narrative of the Citroën Central African Expedition.

From the varying incidents of the journey, from the fatigues, the dangers, and the difficulties overcome by those who accomplished it, the narrative assumes the character of a real romance of adventure, all the more moving because it is true—a romance of adventure in which the young generation should find a salutary lesson of energetic achievement.

Nevertheless, before beginning this narrative it may be well to give a few historic and technical explanations which will bring out its more salient characteristics.

After entering the Sahara by way of Hoggar and the Tanezrouft, the first expedition undertaken by Haardt and Audouin-Dubreuil (the Citroën Expedition) entered Timbuctoo on January 7, 1923.

A few days later it returned to Touggourt, the point from which it had started, after breaking fresh ground in the desert. At that time the mission, on the confines of Mouydir, to the north of the Hoggar, met Monsieur and Madame André Citroën, accompanied by Kégresse, the engineer, who had preceded it on light caterpillar motor-cars, by way of the Tadmait and the plains of Tidikelt.

This first and twofold crossing of the Sahara by automobile demonstrated the possibility of establishing rapid communications between Algeria and western Africa, and planted the first finger-posts on the great routes joining up

the African colonies. It also permitted one to foresee the possibility of employing the motorcar as a means of exploration across the world, and particularly the Black Continent.

The impulse had been given, the movement had been created, and other expeditions by motorcar might follow on these trails. Still more recently several investigating missions had just arrived at Timbuctoo—thus setting their seal on the practical usefulness of the initial effort, and completely demonstrating that the daring projects formed by Monsieur André Citroën, immediately after the first success, were capable of being perfectly realized.

It may be well to mention here the most original of these projects, which aimed at nothing less than the establishment of rapid and permanent communications between Algeria and western Africa.

With this in view, Monsieur Citroën was at that time organizing in his factories a special department destined to bring into being biweekly relations between Algeria and Timbuctoo. During the whole of one year important results were achieved—the establishment of a large rolling-stock, and the construction of rest-houses provided with all modern requirements at Colomb-Béchar, Beni-Abbès, Adrar, Timbuctoo, and Gaô, as camping grounds for the intermediate stages.

Already tourists from every land had placed their names on the lists of passengers, the curiosity of the world was aroused, and considerable activity had begun.

The inaugural journey was fixed for the 6th of January, 1925. The persons who were to be present, his Majesty the King of Belgium, the Chief of the General Staff of the French Army, Marshal Pétain and Madame Pétain, Monsieur Steeg, the Governor General of Algeria, Monsieur and Madame André Citroën, were to give to this event its full significance, and its national importance.

The interest attaching to this vast enterprise escaped no

one in industrial and colonial circles, but an unlooked-for circumstance rudely stopped this fine effort.

On January 2, 1925, after receiving reports of a recrudescence of activity among the tribes of southern Morocco, and the assassination of a kaid, the military authority of the territory of Aïn-Sefra felt it to be his duty to dispatch to the president of the council a telegram in which he declined all responsibility regarding the conditions necessary for the success of the inaugural expedition, which had been planned to take place a few days later. The government forbade its departure. Under these circumstances Monsieur André Citroën adjourned, *sine die*, the inauguration and exploitation of the line.

The Citroën Central African Expedition (the second mission of Haardt and Audouin-Dubreuil) was not to be subjected to these difficulties. In pursuit of the scientific end assigned to it, it was to confirm the real meaning and great importance of the first attempts.

This expedition, conceived immediately after the first rapid journey from Touggourt to Timbuctoo, required more than a year of methodical preparation.

The great length of the itinerary, extending over 12,400 miles of desert, brushwood, savanna, marshland and forest, necessitated the dispatch of five auxiliary missions for the purpose of provisioning the route with petrol, food-stuffs and material, from Algeria as far as the Indian Ocean.

These five missions, conducted respectively by André Gœrger, Eugène Bergonier, Julien Maigret, Jean Boyer and Jean Michaud, attained their objectives—the Sahara, the Niger, Tchad, Oubanghi-Chari, and the Belgian Congo—by utilizing every means of transport they could find, such as short sections of railway, convoys of porters, and especially the river waterways.

All these different convoys of provisions awaited the passage of the expedition on the spot, and dispatched to their destination the collection of films and data they had brought with them.¹

While these preparations were taking place on the spot, the organization in Paris was going on.

This time it was not a question of carrying out a rapid and, as it were, a sporting attempt, but of making a collection of important artistic, scientific, and economic data, and of fulfilling the different missions which had been entrusted to the expedition by the Minister of the Colonies, the Under-Secretary of State for Aeronautics, the National Museum of Natural History, and the Geographical Society of France. It was also imperative to make a study of the junctions intersecting the line from Algiers to Timbuctoo as far as Tchad, and their ulterior prolongation to Khartoum, for it was proposed to create facilities for future travelers to make the tour from Algeria through western Africa, Tchad, Khartoum, Egypt, and Marseilles. To this end, Georges Marie Haardt, the managing director of the Citroën factories and head of the expedition, used all his resources to get together the ablest collaborators he could find to work in conjunction with his faithful companion, Louis Audouin-Dubreuil.

We must give first mention to Commandant Bettembourg, who, having accomplished his mission without mishap, has just been taken from the affections of his family

¹In reading the following pages it will not escape notice how greatly beholden is the Citroën Central African Expedition to the helpful assistance offered to it throughout its itinerary—namely, the experienced collaboration of the French Colonial Corps, the kindly support lent by the Belgians, the loyal cooperation of the English, the cordial welcome extended by the Portuguese; but amongst all these devoted friends special gratitude should be rendered to that great English soldier, Major-General Sir Ernest Swinton, K.B.E., C.B., who graciously facilitated the work of the mission while in the British colonies, by his enlightened counsels and his high authority.

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and friends after a short illness. We must render homage to this fine soldier and fervent colonist. His profound knowledge of the Soudan, the Niger, and Tchad, his keen intelligence and untiring activity made him an excellent organizer. The planning of the scheme of provisioning the expedition and the study of the routes to be taken fell to his care. After he had returned, he drew up reports of the greatest interest for the development of the colonial domain to which he had consecrated his life.

The ethnographical studies were entrusted to Alexandre Iacovleff, a great traveler in Asia, China, and Japan, an accomplished painter, and indefatigable worker, who in the course of the expedition made over a hundred paintings, designs and sketches.

One of the most valuable means of keeping records was the cinematograph. Through it the incidents of the journey could be preserved. Its contribution to the work in hand was of such importance that Léon Poirier, the well-known creator of so many celebrated films, was engaged to take the direction of this section; he was able to present a living narrative vibrating with reality. The collaboration of Léon Poirier in this book has been of infinite value.

The skilful and painstaking operator, Georges Specht, joined Léon Poirier in his efforts. Twenty-seven thousand meters of film, representing fifty films of records, and six thousand photographs were the output of the cinematographical section.

Monsieur Bergonier, who took the place of Doctor Bourgeon at Niamey, was medical officer to the expedition, and took charge of the zoological section; this collection amounted to no less than three hundred mammiferous specimens, eight hundred birds, and fifteen thousand insects.

Charles Brull, the engineer, took charge of the technical material of the motor section; the intelligent aid of the mechanics contributed to its practical excellence. Eight

vehicles with Kégresse-Hinstin propellers were specially provided with a ten-horse-power Citroën motor. The bodies were entirely of duralumin, painted white and blazoned with an emblem giving each a personality of its own; they carried all the provisions, clothing and necessary material. A small trailer attached to each vehicle contained the beds and camping utensils. The caterpillars were each able to carry more than three hundred liters of petrol, and sixty liters of water.

They were driven by mechanics, the majority of whom had taken part in the first crossing of the Sahara by motor-car; their names were Maurice Penaud, assisted by Maurice Billy, as chief mechanics; Roger Prud'homme, René Rabaud, Fernand Billy, Maurice Piat, Edmond Trillat, Henri de Sudre, Joseph Remillier—all veterans of the Sahara; Clovis Balourdet and Albert Gauché joined them in the course of the journey. All of them were intelligent, solid, energetic and devoted, and, in addition, possessed of every valuable technical knowledge; their perseverance and good temper contributed largely to the final success.

As the return of the expedition was to be by way of the Anglo-Egyptian Soudan, Abyssinia and Djibouti, starting from the Congo, a prospecting mission had been sent to Abyssinia under the direction of Commandant Collat and Monsieur de Coheix. But a few days before its departure Messieurs André Citroën and Georges Marie Haardt went to visit the President of the Republic in order to submit to him the plans of their expedition; Monsieur Doumergue drew their attention to the isolation of Madagascar and to the interest which would attach to a study of the lines of intercommunication between our African colonies and the great island in the Indian Ocean.

It was left to Georges Marie Haardt to alter his itinerary en route, if he should judge this to be possible. The

happy change made afterwards in the original program demonstrated the possibility of realizing the wishes of the head of the State.

The following is the composition of the procession of vehicles in their order of march.

NO. OF VEHICLE	EMBLEMS	MECHANICS	PASSENGERS	PURPOSE
1st GROUP				
1	Golden Scarab	Maurice BILLY	G. M. HAARDT	To give the direction, maps, documents, arms.
2	Elephant	PRUD'HOMME	Commandant BETTEMBOURG	Records, treasury
3	Sun on High	RABAUD	Léon POIRIER	Cinema.
4	Winged Snail	PIAT	SPECHT	Cinema.
2nd GROUP				
5	Silver Crescent	Maurice PENAUD	AUDOUIN-DUBREUIL	Sporting rifles, spares.
6	Dove	TRILLAT	BERGONIER	Medical stores, taxidermy, kitchen utensils.
7	Centaur	DE SUDRE	IACOVLEFF	Painting materials.
8	Pegasus	F. BILLY	Ch. BRULL	Repairing utensils.
Supernumerary mechanics throughout the journey: REMILLIER;				
Transit from Oubanghi to Chari: GAUCHÉ;				
From Tabora: BALOURDET.				

In this order the vehicles proceeded until they reached Lake Albert; beyond this stage the expedition divided into four groups in order to reach the coast at four different points: namely, the first (the Audouin-Dubreuil group) at Mombasa; the second (the Bettembourg group) at Dar-es-

Salaam; the third (the Haardt group) at Mozambique; the fourth (the Brull group) at Cape Town, to reform afterwards at Majunga and go on to Tananarivo.

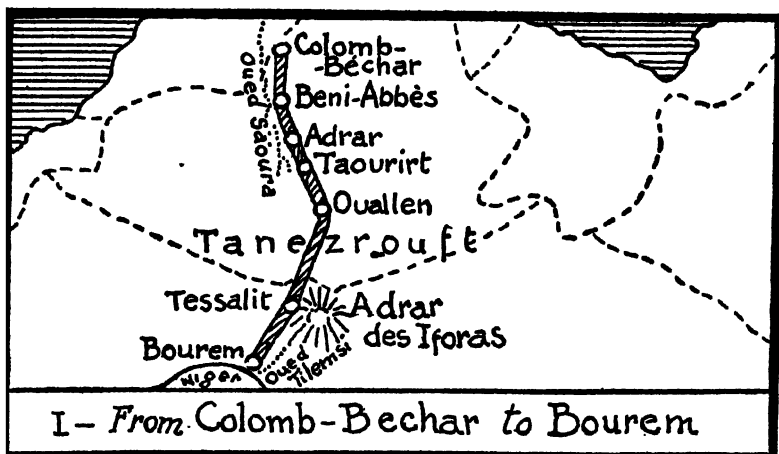
On the 15th of October, 1924, at 2 A.M., in the presence of the inspirer of this grand work of penetrating Africa, Monsieur André Citroën, with a last stroke of the hammer closed up the packing-cases in which the fully equipped caterpillars were to be transported to Colomb-Béchar—the threshold of the desert.

THE BLACK JOURNEY



Route followed by the Citroën Expedition

THE BLACK JOURNEY



ON the 28th of October, 1924, the eight caterpillar auto trucks left Colomb-Béchar to proceed along the bed of the wadi of the Saoura by way of the oasis of Beni-Abbès, Adrar and Taourirt.

On November 5 they reached the wells of Ouallen, beyond which stretch the desert plains of Tanezrouft, where they took a southerly direction toward the heights of Adrar Iforas, which they touched on the 13th of November at the wells of Tessalit.

They followed the bed of the wadi Tilemsi, which descends from the mountains of Adrar as far as the Niger, and reached it on the 18th of November at Bourem.

The second Haardt-Audouin-Dubreuil mission in this way crossed the Sahara by the itinerary which will remain the line of direct communication between Algeria and French West Africa.

Chapter I—The Sahara

October 28—November 18, 1924

COLOMB-BÉCHAR.

HERE the railroad stops. With it the intense life of Western civilization ceases. Beyond Colomb-Béchar the desert begins.

Even now the din of cities is nothing more than a distant rumor; the Great Silence is approaching. Yesterday held the charm of remembrance; tomorrow will bring the attraction of hope; but today is the fugitive moment wherein memory and hope intermingle, wherein fancies crowd one upon another.

After the silhouettes of Paris still held in our memory there succeed the forms of women veiled in the white *m'lafah*; after the feverish life of the factory comes the peaceful return of shepherds in their Biblical costume; after the hideous screech of the loud-speaker sounds the solemn and serene voice of the muezzin.

An image is beginning to enter upon us, to define itself, to swell, to absorb all the others which crowd to melt in it, an image without limit, made up of the sky, earth and horizon in their entirety—it is the Sahara.

How we are moved at seeing it again from the height of a small rocky hill, which we mounted in order to offer our homage on the tomb of the heroic soldiers massacred in 1905!

The desert closed on those who desired to conquer its mystery. They are no longer, but it remains there forever,

the vast adversary, the inaccessible fascinator, which one cannot resist, whose captive one remains even after one has conquered it!

THE DEPARTURE.

October 28, 1924.—The day is beginning, little by little invading the sky, against which stands out the silhouette of the arid mountains surrounding in their massiveness Colomb-Béchar. A rosy glimmer gradually spreads over the tall, motionless palms of the oasis.

The engines turn, the vehicles cast off and reach the plateau. The African troops are there, under arms, to bid us a last good-by—stolid legionaries, trustworthy Senegalese soldiers with their eyes so fierce and childlike by turns, recalling the indolent riverside where their *moussos* slumber under their reed huts; Spahis resplendent in red, sitting upright in their saddles; Mokaznis with their blue mantles, perched on their lofty dromedaries. . . .

Four airplanes spread their wings in the glory of the rising sun.

Accompanied by his officers, the colonel commanding the territory of Aïn-Sefra approaches our wagons.

"The whole army," he says, "the whole of France comes to salute with pride and admiration the Colors under which you are faring forth to explore the French and other colonies of Africa, which a century of colonial expansion has evolved to a state of greater humanity, greater justice and greater happiness. Your mission will consecrate this work. While rendering with you the honors due to our flag, I renew the most ardent wishes for your success and a happy return."

The Colors of France quiver under the warm wind from the south. The nostalgia of the fifes mingles with the vibrating salute of the bugles; and we start on our great adventure.

Like a cortège of processionists in white, the eight vehicles

wind among the stones of the *hammada*. Soon the horizon is trembling under the waves of warm air, forming a deceptive mirage of the desert, already outlining itself to those who are faring forth—a mirage of mighty rivers, lofty forests, and a vast sea—the Indian Ocean.

The sand appearing on the top of the foot-hills announced to us the approaches to the Erg. The dunes rise apparently to the height of Tarit; they go undulating as far as the horizon like immense brown waves. The light of day renders the appearance of the great Erg so palpitating that one asks oneself if this place of desolation is really accessible. Is it not some kingdom of the fairies, or of the jinn, an inviolable refuge of all the strange beings haunting the legends of the Sahara?

In the sky there arises a black point, and the twofold shadow of the wings of an airplane runs along the soil. An object detaches itself from the fuselage and falls beside us; it is a message. Our friend Paolacci, commanding the squadron at Colomb-Béchar, is sending us his last wishes and sympathetic hopes.

May we not say that it is a little in the interests of our winged brothers, the airplanes, that our caterpillars are on their way to creep over the soil of Africa for nearly 15,000 miles, reconnoitering sure routes and places suited for landing, in order that soon the air ways may be opened to regular communications, which will mark the beginning of a new era in the evolution of the Dark Continent?

The Erg is growing blue behind the indented hills which now reveal it, and now hide it from us. We are passing by Djebel-Kerkour, a sinister-looking hollow feared by caravans in a former day, for the robbers of the desert were wont to conceal their ambushes at that spot.

The sky is already full of stars.

We advance through one night without the moon; the ground we are traveling is favorable, and we maintain a

speed sufficient to raise up clouds of impalpable dust, in which the strong rays projected from our lamps trace fantastic shapes.

At times the whiteness of the Milky Way gleams before us; then we seem to pass through the foliage of trees, or skirt the walls of a village. The Sahara, in its desire to seduce or to deceive us, takes on the appearance of a road in France. The illusion is so strong that we feel we must, by a quick turn, get out of the cloud of dust; then the forest vanishes, the wall fades away, before us is the Infinite, and Silence, wherein the beating of his arteries seems to man like some disquieting noise unknown before.

Such is the real Saharan night—motionless under the gleam of the moon or “that obscure brightness which is tumbling with stars.” Motionless and frozen, for sometimes the temperature goes to freezing point after being above 40 degrees (Centigrade) during the day—a natural phenomenon by reason of the intense radiation in the uncovered spaces, but an unlooked-for sensation to those who have had a simple idea of the torrid desert.

We halt when the heat is at its greatest.

By choosing a spot which is slightly raised, and placing the wagons toward the wind and joining them together in pairs under the canvas of our tents, we manage to obtain a cooler atmosphere. In the desert a violent wind often blows when the temperature is at its highest, and at those times columns of superheated air rise up from the soil and agitate the atmosphere.

The night is propitious for the long stages. At the setting of the sun we get under way, after the custom of the Sahara, which our black boy Baba approves, saying that here it is quite the opposite to the custom of Timbuctoo, where he comes from; there the sun is good and the moon is bad. Then too, by night, we find again our surest guides, the stars.

A few hours of sleep bring us a needful break, if not complete rest. The wagons form a hollow square, under the shade of which the camp after a frugal repast slumbers, with the exception of one who mounts guard, for near certain wells we must be on the watch against Moroccan bandits. And there is silence, always silence, disturbed only once during our nights in the Sahara, when we were camped at the foot of some cliffs on which hung the old fort of Timoudi, and we heard the voice of the muezzin, seeming to fall from the stars, sing forth, "There is only one God and Mahomet is his prophet."

Our first bivouac was made at the spot where the Guir and the Sousfana unite to form the Saoura.

There is here nothing to remind one of the country scenes along a river-bank in other latitudes. The Guir, the Sousfana, and the Saoura are nothing more than wadis, that is valleys and river-beds hollowed out by the intermittent passing down of the waters when storms are taking place in the mountainous heights in the region of the Sahara.

At ordinary times the wadis are clearly traced routes, on which may be seen growing stunted tamarisk, and scattered bunches of grass, and where a little shallow water may still be found in the sand.

The Saoura comes down from Atlas as far as the distant approaches to the plains of Tanezrouft, which in the Quaternary Age may have formed a lake at a time when the Saoura was an immense river.

Along its banks numerous prehistoric buildings bear witness to an age that has disappeared. Work in stone is there represented under all its forms, from the great club of the Chellean tribes to those marvelous arrowheads formed like a laurel leaf or a finlike triangle, giving evidence of remarkable skill on the part of those Neolithic artists.

We are leaving the zone of the wadi and are soon passing through utter chaos. This is the *hammada*, a kingdom of

stones, a plateau where the rocks, uncovered by the action of the wind, break in pieces because of the sudden changes of temperature. Their *débris* strews the soil with innumerable sharp-edged fragments, and one has the impression of walking upon knives. From point to point *redjem* and *guemirah* show us the right direction. Mere piled-up heaps of blocks yielding bizarre silhouettes in the general desolation, the *guemirah* stand out against the sky like strange petrified beings left damned in this inferno of rocks—an Arab at prayer, a woman crouching, a prophet with arms uplifted.

Suddenly we come upon an extraordinary patch of diminutive plants growing upon a sandy spot tossed up by the wind.

"Cauliflowers!" cries out Rabaud to his passenger, and jumps to the ground to examine these curious plants which resemble stone lichens. The sand is glued to the thick leaves, the seeds are welded together round them, straining in their grasp the living twigs, which look shriveled up and sad.

The hours seem interminable in this desolate nightmare. The heat is suffocating, but we do not stop; we must keep going in order to avoid that treacherous feeling of somnolence. Our caterpillars seem like lead, our movements grow slower; and at that moment there awakes in us an instinct that may be compared to hope—the instinct of the oasis. . . .

BENI-ABBÈS.

The oasis . . .

On the horizon of this great land of drought, the blue line of the palm grove forms a natural enclosure to the domain of shade and coolness.

Beni-Abbès reveals itself to our gaze under the languorous twilight; the shadows lengthen out and become violet-hued against the rose of the dunes. We ford the Saoura, which

ripples deliciously; some donkeys are slaking their thirst, dromedaries come toward us with steps as of padded felt, and look at us with their short-sighted and disdainful air; children come running up and shout; close to a white-robed Marabout a *ksourien* makes his salaam.

This is the village; a woman draped in blue and gold looks down from her terrace above upon us passing by.

The old *ksar*, the fortified village with narrow approaches, lies buried in the palm grove.

The *ksouriens* are a kind of landed proprietor; their properties are carefully shut off, and one can get inside only through little doors with ancient wooden locks.

One has to stoop on entering the place of Tahar-Ben-Larbi, but on standing upright again the visitor is surrounded by all the charms of the gardens of Armida. Under overhanging palms are seen growing jasmine, tobacco and henna in harmonious disorder; water murmurs in the irrigating channels, while a little farther off water-lilies are dozing in a lukewarm pool.

Beneath the sunshine and shadow two white forms come gliding toward us; these are Labib-Ben-Mohamed and Ahmed-Ben-Ahmed, approaching to offer us mint tea under the palm trees, which Ahmed climbs in the most natural way in the world in order to gather us some dates.

In the evening we partake of *diffah* in the garden of the *kaïd* near by, transformed by the fairy light of the moon into a festive banquet hall, its columns the slender stems of century-old date trees. Whole sheep are roasting before the flames of ancient-looking cooking appliances, while on the outskirts of the palm grove the haunting monotone of the *darbouka*, punctuated by the enticing rhythm of drums, announces the opening of the *âïd* (feast).

The *ksouriens* have always been warriors, and their dances are accompanied by a frenzied expenditure of powder. Their old muskets go off all together in an out-

burst of shouts; the excitement grows apace; the men stamp their feet in ever-quickenning rhythm; the hellish din of battle arises, and their grimacing faces cry out incessantly, "We love war! We love love!"

Love! War! No better explanation can be found as to why the Arabs have always been mighty conquerors.

The ritual of their traditions of love is preserved by the women of the Ouled-Nail, the unveiled priestesses of the most disturbing of all cults, whose strangely painted masks are set in an enigmatic smile, while their undulating forms make a rattling of copper disks and rings, like the serpent of the Bible. . . .

Far on into the night the dancing, shouting, and aroused passions continue by the smoky gleam of oil lamps. We still hear the distant uproar as we pass by a humble wattle dwelling, the former hermitage of Père de Foucauld, dominated by a wooden cross fashioned by the hands of this pious solitary who in the motionless desert found rest from the storms of the world.

We leave Beni-Abbès. On the following morning, toward midday, we are rolling over a plain scintillating with heat; some of our vehicles pointing toward the wells of Fom-el-Khenig, are disappearing in the distance in a wave of dust, and look like those mysterious clouds which of old bore away through space the heroes of Harun-al-Raschid.

On the edge of this plain we come to Adrar and the artificial oases of Touat. Had it not been for the indomitable toil of men who had dug in the sand numerous *foggara* we should be entering upon the desolation of Tanezrouft at this point.

The *foggara* are formed by making a network of channels under the ground, which drain the moisture of the subsoil for a considerable distance. Drop by drop they collect in one spot the water obtained in this manner, thereby becoming the source of life from which is born the oasis.

One can imagine the value of this precious water. It forms the basis of the fortunes held by the *ksouriens* of Adrar, and unwritten laws regulate its possession. The stream issues from a tiny tunnel out of the sand and disperses itself into a rectangular basin from which the irrigating channels of the different proprietors take their supply; the opening of the channel is carefully proportioned in accordance with the rights held by each proprietor—rights acquired by inheritance, valor in war, or commercial exchange. This basin is the active distributor of the energy of the oasis. It is carefully enclosed, and respect for common property results from the necessity each feels for respecting individual property rights; it is a systematized demonstration of an elementary social law. Everyone respects his neighbors' Pactolus.

Lieutenant Paolacci's little squadron has just arrived at Adrar. It is with joy that we meet again the three valiant pilots, for the African sky is full of ambushes. The superheated air is a bad carrier, there are invisible circling eddies in space, which catch the airplane unexpectedly while it is flying. Moreover, there are no landmarks; the ground cannot be well observed through the emanations of the earth, which rise as from a brazier. Direction is difficult, and to lose it is to perish. Who can forget the tragic end of Colonel Lebœuf and Lieutenant de Châtenay, who died of thirst after a forced landing? Who does not yet hear the agonized words murmured by General Laperrine, lying crushed under the wings of his broken airplane, "And I thought I knew the Sahara!"

The presence of the airplanes at Adrar allowed one of us in the course of a flight to take observations over the district we should have to cross. The Erg is streaked like a tiger skin, with straight shadows clearly marking the outline of each dune on the side opposite to the sun. The zone of Touat stands out with the clearness of a map; the palm



*Halt at the foot of the dunes
of the Great West Erg*



*Tessalit, the first water reached
by the expedition after crossing*

groves seem to be all close together—Tamentit, where an aerolite fell in days long past, a black stone which the natives surround with peculiar veneration; Tasfaout, Bou-Fada, Zaouiet-Kounta, Sali, Timadanine, and Taourirt du Reggan, beyond which the desolation of Tanezrouft begins.

Here ends the land of oases where, after we have surmounted the difficulties of the *hammada*, compensations like those we found at Beni-Abbès and Adrar are to be met with. Life is still normal, still human; the Tanezrouft will be absolute desert, desert lacking any oasis, impossible to man, as life without hope.

The Tanezrouft is a space we must cross as if it were an ocean—straight ahead with the bow pointed to an unknown shore. No more tracks, no more *guemirah*, no more *redjem* to guide us; we shall have only the compass, the stars, and at long intervals the traces left by those who crossed it the year before.¹

THE TANEZROUFT.

The day before, the expedition left Adrar in order to reach the wells of Ouallen, and now we shall have to traverse more than three hundred miles without water. The train of vehicles starts in single file. The wind is behind us; no one can imagine what these words represent. It is the complete cessation of any breath of air to compensate us; quite the contrary; any breeze there is becomes a torment, for it blows back upon us a cloud of red dust raised by each vehicle. We are suffocated, saturated with dust; we could almost believe ourselves to be like men turned into red brick. The buffeting is so severe that not one of us, even the most hardened Saharan traveler, is able to do without his goggles. The purring of the engine lulls

¹ The Audouin-Dubreuil Expedition, January-February, 1924, the second crossing of the Sahara by motorcar by the western route, Colomb-Béchar, Tessalit, Bourem, Timbuctoo.

us into a magnetic sleep, perfumed with the odor of petrol and burnt oil. Every now and then we have to turn round and face the wind.

Night descends. The moon is all red. We should like to have kept on going throughout the night, but human strength has its limits. At two in the morning we halt, and lie down to sleep, each by the side of his wagon.

Brull rouses us before dawn. His eye-glass reflects the glare of the lamps. Brull's eye-glass is part and parcel of his personality; its position enlightens us as to his state of mind. If our friend is anxious he takes it out, wipes it, and screws it into his eye with a mechanical but precise gesture. If he is in a festive mood its glance seems to be imbued with indefinable softness. If he wishes to be convincing, it radiates light; if sarcastic, our friend tilts it to an angle of forty-five degrees; if upset, he throws it behind him, or lets it hang down his side.

This morning Brull takes out his eye-glass; he is anxious. Shall we reach the wells of Ouallen today?

We move off again towards the southeast. According to our reckoning, we ought to be able to see the Aseg'rad at about ten in the morning; its peaks to the height of a thousand meters dominate Ouallen.

Shortly the sun rises. We are in an immense plain with not a single landmark. After half an hour's going, the sun becomes uncomfortable; at the end of an hour it is unbearable.

"We are going to begin all over again!" philosophically remarks Maurice Penaud, putting on his goggles. And as a matter of fact, the following wind with the red dust begins again. Ten o'clock; not a sign on the horizon. Eleven o'clock; the heat is as great as yesterday; the eddying waves of dust begin to rise up, the sun gives a flickering light, the horizon disappears into space, and we are in the midst of the mirage.

Afar off, lakes and rivers come into view and then disappear; we see the Islands of the Blest with their purple palm groves; nearer at hand, perhaps three hundred yards distant, little glistening pools of water are seen, and these die away before we reach them. But a still more impressive phenomenon greets our gaze; through the layers of air in perpetual motion the refraction seems to grow crazy, objects lose any permanent shape, everything seems to toss about, to take first one form and then another, or to increase or diminish in size; a hump in the ground seems like a huge rock; the vehicle suddenly takes the shape of one of the rolling towers of Hannibal's armies, next moment it is like nothing more than a telegraph-pole, then it is no longer anything, it has disappeared. It reappears the next second a little to the left of us under its normal aspect—strange, wearying and obsessing hallucinations like the impressions produced by a high fever.

We reach the foot of the defile of Ouallen. Three spiky gum trees are all there is of vegetation in the wadi of Tassen-Ganet. We halt and bivouac.

Ali and Bechir, our Arab boys, are entrusted with lighting the fire. They rush to one of the spiky gum trees, under which is some dead wood, a rare wind-fall in these regions; but Remillier, who is with them, starts back, for close to one of the dried branches a horned viper has risen up with a hiss. . . .

Next morning we start due south at 4:20 A. M. Every one is alert and almost fresh. The water-tanks are full; we should easily be able to last out until the wells of Tessalit.

Dawn shows itself in the sky in a soft harmony of rose and light green; the horizon is clear, as if fresh from the stroke of a paint-brush. The light increases toward our left; the sun rises suddenly and begins the saraband of shapes and contours. At first the refraction flattens out its round face, then lengthens it, giving the appearance of a

deep round bowl or balloon slowly rising above the earth. This fairy scene lasts but a few seconds; the reality will stay with us throughout the whole day.

We are passing over fine sand, which seems never yet to have been trodden. Nevertheless, before us is a white spot—human skeletons.

How long ago did these victims of thirst fall by the wayside? What was their death agony, at eighty kilometers from the wells which might have saved them? One lies stretched out with his face toward the sky. At a little distance two others, resting on their sides, seem in a position of sleep; their hands touch each other; was it the last handshake of two friends? Their clothes, mere frayed-out tatters, still remain; from an open bag grains of corn lie spilled, and on this cursed soil are unable to take root. We pass on in silence.

The route is sprinkled with small round pebbles. We wonder if they have resulted from the action of the sea, and have been gradually laid bare by the blowing of the wind scooping out the dried-up earth, or whether they were rounded, in days long past, by the action of the rain. Could there ever have been rain in the Tanezrouft? In any case there have been trees there; trunks and petrified débris of wood met with in certain spots seem to indicate where former oases have been.

We have now bivouacked three times; each new day the horizon is always the same as that of yesterday. It seems as though it were permanently fixed on some revolving tissue. We are getting out of the habit of looking at our watches or at the calendar. We seem to be like the Sultan Bou Hachen, whose enemies, in the Tunisian legend, removed his camp every day while he was hunting the gazelle; on his return he did not notice anything amiss. Naturally the story turns out badly for Bou Hachen; let us hope that it will have a better ending for us.

One means of measuring the passage of time, in default of any indications of distance, is the length of our beards and the increasing dirtiness of our faces, which it is out of the question to wash. . . .

We break camp for the sixth time, and start again before dawn. We continue to sink deeply into the soil; our pace is slow, entailing a greater consumption of petrol than we had anticipated.

The passenger on the Golden Scarab, busied over his preparations, takes no notice of the increasing light in the sky; suddenly a gesture of Maurice Billy, the driver, causes him to raise his head. The dim horizon is cut by a gleaming silhouette; it is the Adrar! The Adrar of Iforas, the mountain at whose foot lies Tessalit.

Everyone all at once sees this distant mountainside appearing, a dark blue blur with broad fissures. We have so much the impression of being on a limitless ocean that the Adrar represents to us a new continent where life will begin again. One word, and one only, rises up in our minds, full of joy and hope—land!

A NEW LAND.

Life returns again as we get near the Adrar. We take notice of the first tuft of grass, we stop to watch insects at work—small trifles which express a great one, namely, Life—life wherein a man may find and recognize himself again!

Ended the mirages, the unreal, the fantastic; we are regaining touch with normal existence. By midday we see certain kinds of grass; by four o'clock in the afternoon the first lizard passes in front of our procession.

Night descends upon us. We shall not reach Tessalit this evening. But it is our last bivouac in the Tanezrouft.

On the following day at dawn the Adrar is quite near. Nothing but a great plain now separates us from it, a plain

where there are gum trees, acacias, bitter apples and bunches of dried grass, between which gazelles are bounding.

Tessalit. A few palm trees in the hollow of black rocks, a well at which we have to wait for the water to rise up again after we have filled two *guerba* (great water-skins), but what a reposeful spot, since here at last we have reached the end of the Tanezrouft! We can now relish the joy of our bivouac for the first time.

The Adrar is an advanced outpost inhabited by the Touareg Iforas, who are vassals of the Hoggar chieftains, of whom we hold such startling souvenirs. Certainly the Iforas have none of their haughty and noble bearing, but their covering veils, their lances and shields are as pleasing to our eyes as familiar sights.

One of them, Mama by name, is to serve us as guide to the Niger. He warns us frankly that he has only once been there and at that time, he adds, he had not yet cut his teeth! So we are not at all surprised when, twenty-four hours later, he completely misleads us in the brushwood.

"One can lose one's way in the brush, but one does not perish in it."

Bettembourg has only just jerked out this aphorism when a group of Touareg show themselves prudently at a little distance behind some rocks. They take to flight. Mama catches up and brings back one of them who salutes with his hand raised, after the manner of his race. He is young and looks intelligent.

"What is your name?"

"Ikenel."

"Well, Ikenel, you will now act as our guide."

To make him decide, Bettembourg places in front of him small heaps of coins.

"One heap to go as far as In-Rhar; another to Taban-kort; the third for Bourem."

The nomad's eyes sparkle.



"If you go on," he says to the commandant, "I know too the way to bring you back to Timbuctoo."

Ikenel leads us across good ground.

We reach Tabankort by way of the wadi Tilemsi, whereas in 1923 we had arrived there by the Hoggar and Kidal.

Our first itinerary was somewhat longer perhaps, but how different! The Hoggar, the Mouydir, gorges, mountains, and many vivid recollections.

As for the Tanezrouft, one impression only filled our memory. . . .

We could not be choosers. . . . In our opinion Tabankort is the crossing of the ways. . . .

From now onward our advance is rapid; we meet with droves of donkeys, and sheep shepherded by Moors and Bérabiches. —

The vegetation is changing. The date tree of the Sahara has disappeared; we now have jujube trees, great euphorbias, and the famous Soudanese *cram-cram*.

Game becomes more plentiful—oryx, bustard, boars, guinea-fowl. At night we hear again the yelping of the jackal and the sinister laugh of the hyena, alternating with the shrill chirp of the cricket. Whiffs from the turpentine tree and mimosa come to us on the breeze. We are now trundling along through the Soudanese brush.

At last there rise before us the crenelated walls of Bourem whence on January 4, 1923, we saw for the first time the mighty extent of the Niger.

We have barely ranged our wagons in the inner court of the post, to the great astonishment of the tame ostrich which is promenading around, when a woman in blue comes forward smiling.

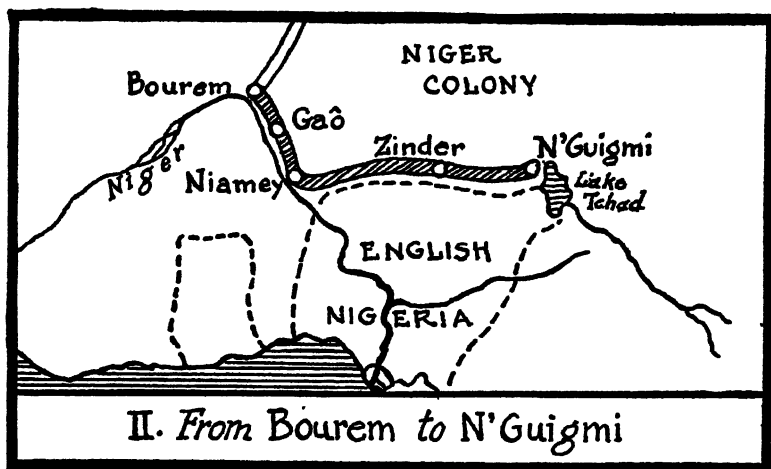
"May God be blessed who has brought you!"

It is Chekkou, the Touareg Aouliminden, whom we saw at Gaô last year.

We mount the terrace of the post. The aspect has not changed. Only the parkinsonias and the fig trees have grown bigger; their double row goes down as far as the glittering river, a vast stream of gold between two green shores.

In the twilight Chekkou strums out the four notes of her *amzad*.

And while the Touareg viol softly drones in praise of the silence of the great spaces, the hollow sound of the tom-tom brings up from the village Koyaboro at Bourem an echo of the black world we are about to enter.



LEAVING Bourem on November 20 the expedition entered upon the tracks running along the left bank of the Niger and reached Niamey at Gaô, from which place the customary route of convoys passes through British Nigeria toward the south of Lake Tchad.

But inasmuch as caterpillars can run apart from any made track the head of the expedition, with the view of keeping within the French territories, directed it to the north of Tchad through the sandy regions surrounding Zinder, the capital of our Niger colony, which we reached on the fifth of December.

Then, passing over the dunes in the region of Mounio, the expedition touched the western bank of Lake Tchad on the outskirts of N'Guigmi on the fourteenth of December, thus effecting the first junction by motorcar between the Mediterranean and the great central African lake.

Chapter II—The Brush

November 19—December 15

THE FRONTIER ZONE.

IN REALITY the Black Continent begins with the Niger. A frontier as regards climate and race, the mighty river is a line only on the map, just like all frontiers. It is really a zone in which nature, animals, and men take their formation both from the world which is outside and also from that which meets one's eye within it.

The Soudanese vegetation is no longer the desert and is not yet the typical African luxuriance; it is sand in which something grows. The river abounds in crocodile and hippopotamus—essentially African fauna; but the ass and Algerian dromedary also come to slake their thirst on its banks. As for the men inhabiting both sides of the Sahara, one powerful link binds them incontestably together: Islam.

A hesitating and mixed flora, a mongrel of humanity; vegetable brush, animal brush, human brush, amongst whom we are to live for some weeks, since, as our direction is eastwards toward Lake Tchad, we shall remain in the same latitude. Now if anyone journeys on the terrestrial globe descending a meridian, each day offers a new spectacle; but if one follows a parallel the countries succeeding each other often offer striking analogies.

Thanks to equal climatic conditions, and possibly to the mysterious influence of the revolving earth, the innumerable different forms of life are not mingled by chance; they form regularly defined bands in which each characteristic

becomes clearly marked, just as patterns, colors and forms appear to unite in horizontal circles upon any sphere under the impulse of rapidly rotating motion.

We leave Bourem in the evening of the twentieth of November. The track is broad, and when we halt, the aspect of our bivouac at once shows that we are living under the new climate. A white mosquito curtain adorns each of our little camp beds; you might almost say it was a dormitory of good little nuns.

We have plenty of fire, occasionally too much of it, for our boys do not hesitate to set fire to the brushwood in order to give light. However, dried wood is not wanting; we can make camp-fires and chat around them, as our rest is now taken in a more leisurely manner than in the Tanezrouft.

Suddenly a form draped in a dark garb appears in the ruddy glow of the firelight. Two gleaming eyes appear above the *litham* (veil); a hand laid on the crossed hilt of a sword; three veiled men come forward and range themselves behind this personage, and the motionless group regard us in silence, for a Touareg is never the first to speak.

"Who are you?"

"I am Igounan the chief."

"What do you want?"

"To arrive at Niamey before you."

"Do you know that we have carriages which go all by themselves and can pass over everything?"

"So much the better, for the white men will no longer require us to make roads for them."

"Look! They draw enormous loads which twenty camels could not carry."

"Let many carriages like that come, so that they will no longer seize our camels for transport."

"And why do you want to arrive at Niamey before us?"

"Because the white lord who commands yonder has given

orders for me to be present with a hundred horsemen at your arrival."

"We shall be there within three days."

Igounan raises his hand and disappears in the night.

One might almost call this the prologue to one of Scheherazade's nights.

VISIONS FROM THE EAST.

The illusion continues. We seem to be living through an Oriental fairy-tale in the far-off times of Tancred and the Saracen kings.

Here we are at Gaô, with its market-place like a bazaar where, as Poirier would say, life goes on the low gear, for here life proceeds easily and without excitement.

Beneath the arcades the burly sellers of oxen or *Arachis hypogæa* (the common peanut) doze in the coolness of the shade. What little business there is to do is transacted under the heavy-leaved mango trees. All the human types to be found in the Soudan elbow each other before the heaps of kola nut, millet, capsicums, or salt. The high-born Touareg and the rich native of British Nigeria are much in request as buyers. The Djoula hawkers give them obsequious smiles, to the neglect of the timid Songhai, whose ancestors, however, founded the great Empire of Gaô destroyed by the Moroccans in the fifteenth century. Of their former power only the tomb of the Askia and the ruins of the great mosque remain at the present day.

Next we come to Ansongo where herons sail over the golden river at nightfall.

It was at this spot that our first expedition reached its extreme point in 1923.

The women, radiant, jostle each other as we pass by and offer us milk and lemons; they dance and laugh. Like the Ganges or the Nile, the Niger, "river of God," supplies its population with abundance and light-heartedness.

Next we come to Niamey.

We make our entry in the midst of a noisy and motley crowd. The regular beat of tom-toms, the brazen accents of trumpets, the shrill cries of women, and the hearty "fofo" ("good morning") of the Djerma make a kind of orchestration for a Russian ballet after the manner of "Petrouchka."

While we get down from our cars and go up to the white and very modern figure of the administrator, who cordially welcomes us, three gigantic-looking horsemen on caparisoned palfreys—a living picture taken out of the past—make their appearance. They are covered with armor of startling colors, and wear plumed helmets; by way of salute, with a martial gesture they raise aloft a gleaming scimitar.

Can they be of the company of Frederick Barbarossa? Whence came these unexpected paladins?

Amongst many of the Djerma tribes of Sudié race, the horsemen wear rich costumes. Of a truth their caparisons and armor are not really genuine; they are made out of kapok mattresses; their helmets are fashioned of sheet-iron and copper; but what are the fashions that their primitive costumers have copied? What oral tradition has brought down to them the memory of medieval armor?

These coverings seem to be very old. They were not made by those who wear them, nor by their fathers, nor grandfathers. Further than that the natives cannot count, and we may imagine an interesting hypothesis: did not the last two crusades bring on to African soil the knights of the West? What is to prevent our supposing that the Moorish caravans, led by the standard of the Prophet across the desert as far as the regions of the Niger and Lake Tchad, brought with them some of the armor taken from the crusaders in their victories? We may at least make this conjecture even if we do not believe it entirely.

Haussa archers in front of the residency complete the

externals of our supposition. Here again we meet with women bearing gourds of milk, eggs and sweet potatoes, and children coming from the river with fish bigger than themselves borne on their heads—the preparations for a feast which Harun-al-Raschid would have loved to describe, and at which, a few hours later, we were the guests.

The thirty-seventh course has just been served. The punka beats a slow time to protesting digestions; a curtain is raised, shrill music from the zither is heard, and Adrien, the Ouoloff chef, black, fat, and smiling, comes forward with a cortège of little negro boys to present the *pièce de resistance* which crowns the dessert.

Outside, the sun, now low on the horizon, announces the hour of public rejoicing. The crowd is assembled in an open space, which it enlivens with a noisy chattering. The notables are seated in their place of honor, clad in gandrums and long white robes. Beneath the shade of straw hats, made in the form of a gourd, their black countenances look like ebony in contrast with the ivory-white folds of their garments.

As soon as we arrive the fête begins. The celebrities of the day are first presented to us—little Mahmadou, who at four years old knows how to stable and groom his camel; next, Toufounis, the *kalao* man, who has come especially from Dosso to exhibit his talents to us. The *kalao* man is a hunter of the bustard. He catches these huge birds by the hand and in the same way seizes wild ostriches.

Toufounis wears on his forehead a piece of wood curiously wrought and representing the head of a *kalao*, the wading secretary-bird, whose long crooked beak surmounted with a hollow horn gives it the appearance of a bird from the Apocalypse. The *kalao* is very difficult to approach. Does it make use of the hollow funnel of horn surmounting its beak as an amplifier of sound? The fact is that this strange bird scents danger from a great distance. It is the



protector of the heavy flying bustard and the wingless ostrich. The bustard requires a certain amount of time to fly away, and the ostrich knows that its way of retreat is circumscribed by natural obstacles. These two great birds have need of warning at the approach of danger; and so they seek out the neighborhood of the *kalao*, which gives them due notice. After this let anyone who will maintain that beasts have no intelligent mind!

But men are possessed of it as well, and Toufounis, having remarked the pact existing between the bustard, the ostrich and the *kalao*, found means to take advantage of it. Disguised as a *kalao*, his practice is to conceal himself in the tall grass from whence emerges a long beak attached to his long neck, which he moves about with his head in a most natural manner. The unwieldy and confiding birds come and place themselves under the guardianship of this false brother, who leads them straight to his nets. Toufounis is a fine hunter.

The diabolical cadence of a tom-tom now begins. A circle is formed in the improvised arena. Coryphées grouped round the musicians announce, after the manner of a former day, the theme of the dance which the fair Songo and the incomparable Kadi are about to begin; namely, the Kouli-Kouta, a parody of the former human sacrifices in Dahomey, a neighboring and enemy country, whose savage and uncircumcised denizens have submitted to conquest by the whites.

Kadi is the priestess. Nobly draped in a blue peplum she has the somber look of a black Tessandier. She sharpens in cadence two great knives, one against the other.

"Diaram! diaram! diaram! Cut! cut! cut!"

Her countenance is fierce, yet her gestures are full of nobility; it would be impossible to play better the rôle of the cruel priestess, or surpass Songo in that of the smiling victim—smiling desperately with all her white teeth show-

ing, and with a real ability which the movement of her shoulders renders voluptuous.

Ah! the frenzied pulsating nostrils of Songo with their little silver disks! A black, perfectly proportioned Venus, a Venus of expansive laughter, offering her sex to Kadi's knife and her magnificent body to the flattering caresses of the coryphées, who pursue her frantically in a rapid martial two-step: "Diaram! diaram! diaram! Cut! cut! cut!"

It is a marvelous ballet. Poirier rushes forward, followed by the faithful Specht, who puts his apparatus in position, advances, draws back, gets the focus, adjusts the diaphragm, gives three turns, ticks off the mark, gives three turns back with his hand on the handle, and laughingly says, "I'm ready!"

Alas! it is all up with the show! The musicians have suddenly ceased. Kadi and Songo are now only two negresses, the coryphées are only native girls in tatters, and everyone looks at the operator. The preparations have killed their enthusiasm; mechanism, while seeking to catch them, has crushed out the airy flights of art.

We regard Poirier with consternation. His look becomes precise and full of authority! He has seen what is the matter and runs to the musicians; like an orchestra leader he urges on the *tôm-tôms* to a frenzied allegro, and turns to Kadi, whose knives begin again the cadence of their sibilant sharpening, and to Songo, whose shoulders begin to undulate again. The movement breaks out, quickens and becomes a whirlwind; one could almost say that a commutator had again released among the performers the current which had been interrupted for a moment; they follow the gaze of their director, and, too excited to think of posing themselves, forget the apparatus before which they are moving.

And we can understand Léon Poirier's protest when we dub him an impresario. "No, no! Inspirer if you will, but impresario, no, that has nothing to do with it!"

Suddenly shouts arise; there is a backward movement in the crowd; some people are thrown down by an avalanche of warriors—a charge. A circle is formed, and a horseman, with his shield held aloft and his sword waving in the wind, rushes at a gallop into the arena, and all at once sharply halts his horse and makes it kneel down. A barbarian arriving by the Appian Way and halting before one of the peaked tribunes to announce a Roman victory could not have made a finer entry. It is Igounan and his hundred Touareg Aouliminden, who have marched three days and three nights to come as they had said.

The foaming horses caracole, and the men shout. These are the former masters of the whole of this black people.

Suddenly Igounan catches sight among the notables of Salifoukando, the old Haussa chief who, some while back, killed his father in a famous combat.

His thoroughbred makes one bound and darts forward.

Salifoukando draws himself up. The Touareg Achilles and the Haussa Priam face one another and discharge epic insults. Their adherents throng around them, and a set-to is imminent.

But the commandant at Niamey possesses power and is able to insure peace. The civil guards rush forward and separate the enemies, and in order to appease their warlike ardor the Aouliminden are reduced to the necessity of pretending to engage in single combat, thus bringing to a conclusion this day, which has called forth so many incidents of the medieval East, with a sham tournament. These picturesque survivals will be renewed; for as we get nearer to Zinder we enter more and more into the region of the black Sultanates which our itinerary will traverse from Niamey as far as Lake Tchad, by way of Dosso, Dogondoutchi, Maradi, Tessaoua and Zinder.

If it is correct that nature and climate influence the development of humanity, the natives of this region evidently

must have been able to adapt themselves without effort to the religions and customs which came from Arabia.

We are still, as a matter of fact, in a country of sand, and the desert is not so far off but that we can feel its influence here.

Spiky gum trees, baobabs, tamarind trees, karatas, and dwarf palms are met with in clumps, which are generally rather sparse; the river system is still that of wadis. But in the land of these black Sultanates the wadis are called *goulbi*, and the scattered, gnarled tamarisks are here replaced by a vegetation which seemed to us to be very abundant.

The water remains much longer in the *goulbi* than in the wadis, and leaves behind not only a thick layer of vegetable mold but also, here and there, stagnant pools such as that of Turbanguida, around which a pleasing flora grows, supporting a plentiful fauna.

The *goulbi* of Maradi is particularly enchanting. As we get near it the tracks of hard sand, which are favorable to our caterpillars, provide us with an easy approach, and become transformed into large avenues. Here we meet with scantily clad men hunting with bow and arrows, the copper forms of women moving behind the trees, and horsemen galloping about like centaurs; these are Peuhl nomads, whose proud bearing and Roman salute proclaim their Asiatic origin.

The Sultan of Maradi, who is Peuhl, goes by the name of Serki (chieftain) Moussa.

He comes to meet us on horseback, surrounded by his red-turbaned *dogari*, who form a cohort of impressive-looking janizaries. His chief attendant shelters him under a great umbrella adorned with a circling ring of herons' heads. His court jester precedes him, uttering cries of different animals.

The musicians follow a short distance behind, tapping

on their drums and blowing long horns after the manner of Joshua's soldiers before Jericho. To judge from the appalling din which we hear it is not astonishing that the walls of that city fell down.

Amongst the escort of Serki Moussa is an extraordinary rider, clad in a coat of mail and wearing a leather helmet. The mail is very characteristic; there is no doubt that it was originally a coat of mail worn by a Templar. This is an even more intriguing fact than the costumes we saw at Djerma.

We pay a visit to Serki Moussa at his summer residence of Madarounfa, a village of repose and pleasure at the edge of an artificial lake which was ingeniously constructed by his father.

*Ah! quelle belle vie,
Que la vie, que la vie
Du Sultan de Maradi.*

This might well be the opening song of an operetta in honor of this happy sovereign!

His budget balances; his *mata* (wives) as well as his subjects obey him; he possesses numerous fields of millet and indigo; his dignified sister keeps his house in perfect order; in his garden he can contemplate Fatima, the favorite, suckling his latest child beneath the shade of a baobab, or observe the wobbling flight of toucans with their huge beaks, thinking the while how wise were his ancestors who did not put the verb "to run" in the vocabulary of the Hausa tongue.

*Ah! oui
Quelle belle vie
Que la vie, que la vie
Du Sultan de Maradi.*

Nevertheless a shadow darkens Moussa's picture of contentment; he has a hundred mothers-in-law!

THE MAN WITH A HUNDRED WIVES.

Serki Moussa married four or five of the sixty-seven daughters of Barmou, Sultan of Tessaoua, whose harem numbers a hundred women. Moussa has confided to us that he does not often go to visit his noble father-in-law.

Old Barmou (a black man is old at forty-five) is noble, for he belongs to the Haussa dynasty and is descended from the great Changana V. He should have preserved some traditions, and the mystery of his harem draws our curiosity.

What goes on behind that great white wall, ornamented by a portico geometrically variegated with designs in ochre, black, red and blue, past which, with footsteps silent on the warm sand, pace women bearing calabashes?

The official means at our disposal make it easy for us to obtain an entry into Barmou's house, but there are several enclosures in this paradise of Mohammed; we should like to cross the circle of the initiated, bag and baggage, that is, with our cinema apparatus. That is where the difficulty lies.

A circumstance comes to our aid. Barmou has received a present of a Ford car from an American—Americans find their way everywhere. After the American had left, the Ford refused to budge. Barmou called into consultation a former native chauffeur of the postal service of Zinder, who worked at it for eight days; not the faintest sign of an explosion in the cylinders. While we are trying to win the favor of Barmou his distrustful eyes suddenly brighten. He perfectly understands what we are after, and realizes the advantage which the situation offers. He leads us toward the shelter where the Ford, quite new, lies.

"You who have come from France by car, could you make it go?"

Piat and Remillier bend over the silent car, examine it and smile; we hear a click, a few turns of the starter, and



Barmou, Sultan of Tessaoua

the motor starts with a noise like thunder; the former native chauffeur of the postal service had not established the contact.

"The white men know many things," concludes Barmou, "and there is nothing I can give you, for you are more powerful than I am; but if you would like to enter my dwelling, it is at your disposal, as it is to my friends."

After passing through the multicolored portico we find ourselves in a white-walled passage. Two young negresses drop their calabashes and take to flight along a wall pierced by low doors at regular intervals, like a honeycomb. It is the quarter occupied by the women who have recently entered the harem. Five of them are pounding up millet in the same mortar. They are barely fifteen years old. Our arrival is the signal for a general flight; it is just like schoolgirls at play. But Barmou thunders like Jove and beats the air with his rod in a manner there is no mistaking, and the schoolgirls come back, timidly, rolling their dark eyes. The hair of each of them is arranged in a crest, bound together and studded with silver ornaments, and their loins are girt with a blue cloth. A tall woman, thin, dried-up, ugly (and consequently well covered) advances toward the master. Aghia the matron's office is to bring to the sultan's presence each night the companion he wishes. Barmou gives her an order and takes us to another building, a home of retreat, to judge from the age of the women. These have no fear of us; on the contrary, one of them even makes toothless grins at us. She is Iagoari, the former favorite.

We are in a vast courtyard, in the midst of which there is a mango tree giving a thick shade, beneath which Iagoari places a few mats; the sultan presents his wives, led in by a little obese negro clothed in a dirty and musk-scented robe; he is Kaka, the eunuch.

The women bow with a slow ritual; alas! they are veiled.

Barmou allows us to see only one face, but it is that of his favorite.

Barmou offers us some peanuts, and we consume them to the sound of a monotonous chant accompanied on triple-chorded instruments twanged by blind musicians, for no man of his race may see the sultan eat.

After that we penetrate the half-light of a vaulted hall of twisted pillars. The walls are two yards in thickness; the cunningly devised doors give access to real labyrinths; inside this building sounds from outside are no longer heard.

Our eyes become accustomed to the obscurity, and are able to distinguish on the walls huge designs in bright colors like those we saw on the portico. Barmou, lifting a hanging of matting, shows us a niche or alcove, thickly carpeted, where there is still hovering the smell of incense. An earthenware lamp, standing high, is alight. Aladdin's lamp or watchman of love? . . .

Zinder, which we reach after Tessaoua, was formerly the crossroad of the migrations from Asia across the desert.

In spite of its ruined walls the old city preserves an air of grandeur, with its citadel and houses scattered here and there in a setting of brushwood and rocks.

The history of Zinder is made up of war, violence, and bloodshed; it has been the prey of rival dynasties, conquered or conquering, turn by turn. Today, Zinder has forgotten its tragic hours; the former slave-market is now supplied only by the barter of cattle and millet.

However, it has preserved the traces of the passage of so many different races. The entrance to the native fortified village, the Birni, is a real Babel. While a Haussa is exhibiting the *Dai-Mabo*, the African Punch, a Peuhl is charming serpents, or offering his body to the flagellation of the *Charo* in proof of marriage. A little farther on are

to be seen the *Hazena*, fetishists bristling with feathers and clattering all over with iron bracelets, their faces daubed in white patterns; they are dancing the *Koraya*, a ceremony of initiation.

Barma-Mata, Sultan of Zinder, occupies a dilapidated palace, but its aspect is full of grandeur. He receives us before the iron-studded door. His followers, servants and wives surround him; behind him his war-horse is snorting.

Clothed in white and with a purple head-dress, he leans on his scepter, a tall staff with an ivory top. He is accompanied by his nephew, a frail-looking youth, who wears with some grace a *boubou* covered with embroidery.

Barma-Mata, in spite of his having kept up the old forms of ceremony, has a modern mind and is a sincere friend of the French. He is not unaware that if his ancient palace is still standing this is due to the neighboring citadel where from the folds of the Tricolor are wafted the memories of our colonial glory in the winds of mighty spaces. The citadel is called Fort Cazemajou, and its enclosure shelters the hut of dried earth which was the dwelling of a great African, General Gouraud.

The European town of Zinder, in which the need of provisioning ourselves causes us to make a stay, is built at some little distance from the citadel, and is quite apart from the native quarter.

Brick houses with terraced roofs, spacious and built well apart, euphorbia trees growing in the sand, an agreeable residency, pleasant residents, and a charming welcome—Zinder calls up to our minds a short period of repose, a happy recollection.

At Zinder we receive a kind telegram from Sir Hugh Clifford, G.C.M.G.; G.B.E., the Governor of British Nigeria.

From Dosso we skirt along the northern frontier of this colony and continue up to Lake Tchad. A rich and pros-

perous colony, it has its seasons of abundant rains, unlike its French sister colony of Nigeria, into which the sands of the Sahara bring their drought. Its soil is fertile, and growing cotton is seen after leaving the banks of the Komadougou.

We regret not being able to go as far as Kano, a fine native village in the north of Nigeria, and the last remaining vestige of any size of the great black Sultanates.

ON THE OUTSKIRTS OF TCHAD.

On December 9 we leave Zinder on our way to the Tchad. After accomplishing eighty kilometers of good going we find ourselves again in the brush; little by little it is changing in appearance.

Beyond Gouré we reach the country round Mounio. The going is becoming very difficult; great hollow basins are seen amongst the grass-covered dunes; these are the *kori* (depressions in the surface), covered by extremely dense tropical vegetation. In the rainy season, at the bottom of each hollow a little pond is formed, the water of which, on account of the nature of the soil, is saturated with chalk salts, potash and soda. The rapid evaporation reduces these pools to natural salt-marshes, from which carbonate of soda is taken. The natives make use of this as a condiment, but our housewives would certainly use it for washing purposes. The carbonate of soda serves as a natural manure; on this account the vegetation of the *kori* is exotic, like the products of a hot-house—tall reeds, cactus, dwarf palms, forming impenetrable thickets dominated by the *ronier* tree and branching palms.

Pink ibises fly away in alarm as our cars pass by. They volplane in large circles and seem to be inspecting these unknown monsters which glide through the thicket with a noise of broken branches. Scared gazelles scamper away, monkeys climb the highest tree tops, with their human-

looking eyes gazing in astonishment; the unknown is synonymous with something to be feared in the eyes of the inhabitants of the brush.

Descending into these hollow craters is nothing, but to go up the farther side is severe work. Here never before have the wheels of any automobile left their double track. Our caterpillars climb up and hook themselves on to the soil, sometimes assuming positions which defy the laws of equilibrium.

On the following day we camp at Garoua, two hundred and seventy kilometers from Zinder. The heat is suffocating. One of our sturdy mechanics, who had a touch of sunstroke in the morning, can rest here for a few hours in a rudely made shelter.

De Sudre points out to us a *trigonocephalus* (a very venomous viper) lying asleep near one of the cars. Bergonier, our naturalist, desiring to have this reptile for his collection, seizes his rifle and makes ready to fire pointblank at it. We stop him, for the grass is so dry that there would be danger of its catching fire. The snake wakes and erects itself, swelling out its cheeks with anger; we retire for a few paces, and the *trigonocephalus* thereupon disappears under the disconcerted gaze of the intrepid Bergonier.

We are all very tired, but the end is approaching.

We take the shortest cuts through the brushwood; the ground is becoming hard; this kind of loamy soil holds together in a firmer consistency during the dry season. We roll on between spiky clumps of trees, through bushes where guinea-fowl slumber, through villages from which issue women with cries of joyful welcome. They run in front of us, executing an extraordinary dance. They might be pupils of Isadora Duncan, and the grace of these human beings bounding aloft in freedom gives us a picture of a black Eden which the dancers of Tanagra have informed with their art.

After leaving Mainé-Soroa we skirt the Komadougou across the country of the Manga, a district of *kori*, shepherds and tillers of the soil, peaceable and friendly people.

All is going on as well as possible, and we ought to arrive at Lake Tchad sooner than we expected. This is fortunate, as the severe crossing over the *kori* has exhausted our reserves of petrol.

Suddenly we reach water which bars our route; the natives cross it on ingenious rafts constructed of gourds, but we are compelled to go round. It is the stagnant little lake of Toumourou whose marshy border obliges us to make a great detour to the northwest.

Uneasily we gage our petrol tanks. Our native guide thinks he knows a short cut, but at the end of three hours he has completely lost us in the thorny undergrowth.

During our first journey across the Sahara we had noticed that the rapid progress made by our automobiles put out the calculations of the natives, who are accustomed to reckon the stages by the pace of a camel, or of a man on foot. The speed at which the different districts are passed changes their aspect. In a native's reckoning, time and space, or distance, are one and the same thing; he no longer recognizes them and ends by losing all idea of direction.

We have very little petrol left; we divide it all between two cars; they go on in front of us, while we, with the bulk of the expedition, bivouac where we are.

It is night. For a little while we follow with our eyes the gleam of the headlights, which are disappearing in the direction of Baroua to the northeast. There, fresh supplies have been awaiting us for some time. Soon everyone falls into a sound sleep beneath his mosquito-net, giving no thought to the evil beasts roaming in the dark whence the howling of the hyenas comes to our ears.

Next morning the cars sent out have not yet returned;



The cavaliers of the Sultan



Before the fort of Zinder

but we are not uneasy, for "in the brush one may lose one's way, but one does not perish."

While awaiting the return of the cars with their supplies, everyone makes a little tour round the camping ground; we follow up wild pig, and ostriches, and bring down enough guinea-fowl to provide ourselves with one apiece for lunch. (Bergonier misses nothing, whether it be a blackbird or a sparrow, thus adding to his collection of birds with a merciless satisfaction. Iacovleff has set up his easel under the shade of a karatas. Luncheon is served on little tables under a mimosa.

"*Acacia tortilis*," Bergonier calls it, correcting us, while cutting open a guinea-fowl with the skill of the eminent taxidermist.

Toward evening joyful shouts arise; our fresh supplies have arrived.

We fill up with petrol and then move on.

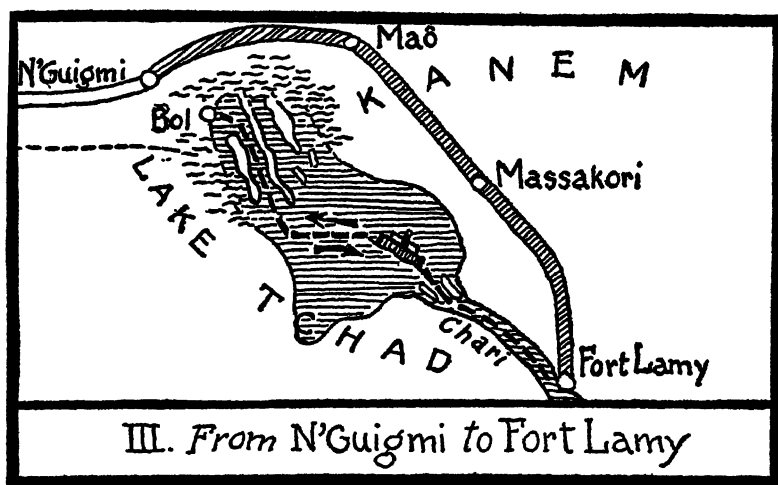
At dawn, on the fourteenth of December, after climbing a low dune outlined by a scanty growth of vegetation, we suddenly see before us the green reeds and marshland of Lake Tchad stretching out as far as the horizon.

Tchad! The immemorial meeting-place of caravans, the great interior sea, the end of so many great efforts made at the price of so many sacrifices! Can it be this desolate level space, choked up with reeds and aquatic plants? But a moist refreshing breath now meets us. Scanning the wide expanse with our field-glasses we discern beyond the dense green vegetation of our first view, large blue patches toward the southeast—open water!

From the station of N'Guigmi, which we reach a few hours later, we have the joy of sending off the following telegram:

Today, December 14, we have reached Tchad, the first purpose of our expedition, thus realizing the first

connection by automobile between the Mediterranean and the great Central African lake, entirely on French territory across the Sahara, the Soudan, West Africa and our Niger colony.



AS the shores of Lake Tchad were impracticable on account of floods the caterpillars proceeded over the sand and followed round the great lake by way of Mao and Massakori, through the country of Kanem as far as Fort Lamy, the capital of the Tchad colony (December 24).

A short stay at Fort Lamy was decided upon in order to overhaul the caterpillars, and the head and some members of the expedition went down the Chari on board the Léon-Blot, the former gunboat of Gentil, the explorer. After crossing Lake Tchad they reached the station of Bol, visited several islands and returned to Fort Lamy on the first of January.

On January 3, 1925, the caterpillars were transported on lighters to the southern bank of the Chari and proceeded on their journey.

Chapter III—Lake Tchad

December 16—January 2

A FEW HISTORICAL NOTES.

AT Tamanrasset, when standing before the tombs of General Laperrine and Père de Foucauld, lying side by side, the Hoggar seemed to us to represent the real heart-center of the French Sahara, its Palladium and its Pantheon. And is not Tchad equally the Pantheon and Palladium of French Equatorial Africa? On the murmur of the wind bending down its papyrus stems do we not hear the great names of our colonial history? First, Faidherbe and de Brazza, the pioneers; then those who had the joy of reaching as far as the lake, Monteil, Gentil, Foureau, Lamy, Joalland, Meynier, Dybowski and Tilho; lastly, those heroes who perished in their attempt without having been able to reach it, victims of men or of the climate, Flatters, Morès, Cazemajou, Crampel, Maistre and de Béhague. What a list of dead heroes, but what a magnificent page of history!

The history of Tchad sums up the history of Central Africa. The races who disputed the empire of the Dark Continent have always centered around it; they understood its commercial importance, they had an inkling of its political rôle, for it nourishes the rich plains of Bornou and Baguirmi, and is the center of the system of rivers bounding on the south the arid lands of the Sahara.

From the first years of the nineteenth century the three great colonizing nations of Europe have aspired to its con-

quest. To the Germans it would have opened up routes between the Cameroons and Tripoli; to the English it would have been the means of uniting Egypt with the Niger; to the French it assures the unity of their African Empire.

Known in antiquity by Ptolemy and the Arab geologists, half surmised by Clapperton and Denham in 1823, visited in turn by Overweg in 1851, by Nachtigal in 1871-72, skirted by Monteil in 1892, Lake Tchad was finally conquered by Gentil, Foureau, and Lamy in 1900, and scientifically studied by Tilho in 1912.

Our hold on Tchad has been extended by warfare; from now onwards it is a French lake. To this we had a right, thanks to the heroism of our explorers, and of our soldiers to whom falls the honor of having overthrown the power of the Sultan Rabbah.

Rabbah was the most formidable of all the black adventurers who attempted to oppose European expansion in Africa. His history is one long sequence of devastation. He was the Attila of Tchad, and vowed hatred to the death against the Europeans, whom he blamed above all for having interfered with the slave trade, which was the principal source of his wealth.

In May, 1891, the great Senoussi caused the massacre of the Crampel expedition when it had reached El-Kouti on the route to Tchad.

In 1898 Gentil successfully transported, piece by piece, across the equatorial forest, the small steamer *Léon-Blot*, which he launched on the Chari—a really wonderful performance. He came down to Lake Tchad, but had to leave it for a time in face of the threatening attitude of Rabbah. This retreat offered a pretext to Rabbah to devastate the Baguirmi country and drive out Gaourang, its king, who in his eyes had been guilty of having given a cordial welcome to the French. A small column under the command

of Bretonnet, the resident, endeavored to put a check on this terrible despot; it was attacked on July 17, 1899, at Togbao, by a considerable force, and was completely annihilated despite a heroic resistance.

Bretonnet was wounded and, still alive, was brought before Rabbah and by his orders beaten to death; at the same time Rabbah sent to his son Fadel-Allah an order to hang Monsieur de Béhague, another Frenchman whom he held as a prisoner. Béhague met his end with incomparable fortitude.

"I am going to die, but I have no fear," he said. "As for you, Rabbah, and you, his sons, and you, his servants, I tell you that before twelve moons are past you will no longer sleep in your huts; France will have avenged me."

This prediction was fulfilled.

Three expeditions, that of Foureau and Lamy, starting from Algeria, that of Joalland and Meynier, coming from the Niger, and that of Gentil, ascending from Bangui, proceeded to march toward Lake Tchad, where they met.

Gentil was on the Chari at Tounia. Stirred with indignation on learning of the execution of Bretonnet and Béhague, he did not hesitate to take the offensive, although he had at his disposal only three hundred and sixty-four rifles. The advance guard of this valiant troop was commanded by Captain Robillot; it started along the right bank of the river.

Gentil embarked on a large lighter in tow of the *Léon-Blot*; he carried with him two guns, an eighty and a sixty-five, which made up all his artillery.

Rabbah awaited the French at Kouno. A fierce battle took place on the twenty-sixth of November. The results were indecisive, but for the first time this sinister emperor saw his star beginning to pale. It was to be finally extinguished at Kousseri on the eleventh of the following April by the victory of the Foureau-Lamy expedition, swelled in

numbers by that led by Joalland and Meynier, with which it had been able to effect a junction at Goulfaye two months before.

Rabbah was killed during the action, but we had to deplore the death of Lamy, the heroic commandant.

The fall of Rabbah put an end to the bloodthirsty history of Tchad.

A few days after the battle of Kousseri, Gentil found the victors at Mendjaffa.

The pacification of Tchad was completed by that of Kanem, in which took part Colonel Destenave, Commandant Testard, Captain Millot and his lieutenants Pradier and Avon, the first of whom was killed, and the second severely wounded at the battle of Bir-Allali against Sheik Barani-Mokaddel, the lieutenant of the great Senoussi in the district of the Ouled-Sliman and the Tebbou.

The scientific exploration of Tchad was made in 1912 by Colonel Tilho, who brought back a most remarkable written report of this region.

THE TOUR OF THE LAKE.

Lake Tchad disappears to the north amid desert dunes, where it forms into numerous islands and extensive marshland.

We were counting on skirting the west coast in order to reach Bol. But Lake Tchad is full of mystery, as everybody knows; it has periods of overflowing and sinking, and the laws governing this have not yet been determined; they do not correspond with the rainy season. Is the lake fed from subterranean sources, which are themselves subject to unknown recurring movements? Do the alluvial deposits brought by its great affluents, such as the Chari and the Logone, choke up little by little the southerly end of the open water, forcing it back toward the north where the dried-up sand of the dunes and the bottomless marshes

swallow it periodically? This is merely hypothesis; but one fact is certain; it is now impossible for us to go to Bol on account of the floods. We must therefore reach Fort Lamy by way of Mao.

The dispositions necessary to arrange this new itinerary entail a stop of forty-eight hours at N'Guigmi, to the great joy of Léon Poirier and Iacovleff, who, in the name of art, were lamenting over the fewness of our halts.

Our dials mark seven hundred kilometers from Zinder, seven hundred kilometers over virgin ground, where progress has been slow and the days entirely taken up with the material effort of keeping on going ahead.

At N'Guigmi art may discover some models, and the cinema some interesting subjects.

The Tebbou and Kanembou village women have a quite special grace, especially the Kanembou, with their height, their long sinews, their indolent walk and almond eyes. They are not negresses, but black women. To convince oneself of this one need only observe the look of jealousy which Maïram-Kouddou, a free woman, casts upon Ayagana, the beautiful captive whose portrait Iacovleff is painting.

Maïram-Kouddou carries her indigo waist-cloth with a certain nobility; her black skin has reflections of bronze; her fine face is marked by three vertical tattooed lines: one from the forehead down the nose, and two others, shorter, marking the cheeks. Her hair is parted and falls in little plaits on each side. A smile discloses her beautiful teeth, but her eyes transfix Ayagana, who bends her head toward the bangles on her wrists and ankles.

It would appear that Maïram's gaze weighs heavily on Ayagana's shoulders. Maïram, curving her hips, chants in a low voice a slow refrain on three notes:

My name is Maïram, Maïram,
Maïram, sister of Kondoukoye,

Maïram is fairer than all others;
If that be not true
Ask her suitor Boukar.
Just as the black boubou
Is different from the white boubou,
So is Maïram different from other women.
If the blue boubou and the white boubou
Are like to each other,
Then Maïram is like the rest.
Maïram, daughter of a chieftain, is incomparable;
Before her, daughter of a mosquito,
You have nothing to do but take to flight.

Poirier has gone down with two cars to the native village which spreads out at the foot of the station, and a crowd, soon reassured, is gathering round these prodigious machines.

The men are mistrustful, look on and feign indifference; but the women and children utter cries, are highly amused, and dance the Kanembou step, the character of which, with its expansive rhythm, reminds us of the gestures of the black Tanagras that we caught a glimpse of in the bush. The *Guana Goupterra* looks like a competition of high leaps; the *Kolo*, cinematographed with the apparatus at dead slow, will show on the screen the graceful Kanembou.

The Tebbou, when they sing, wave their veils round them; this is the *Bandara Boundou*, giving indications of the manner which won celebrity for Loie Fuller.

Then there is the *Dankari*, a dance of fetishist origin, which is forbidden by the Marabouts who still preserve here the grim but austere doctrines of Senoussi. The *Dankari* is danced by a man and a woman; that fact alone is enough to render it obscene in the eyes of the fanatic Mussulman.

On leaving N'Guigmi en route for Mao we continue our slow progress in the moist sand. We go round the north shore of Tchad at some distance from its marshy border, taking care to avoid the deep fissures in the slime produced by the sun.

Notwithstanding, as night falls, serried cohorts of mosquitoes emerge from their hiding-places and do not take long to discover us. Bergonier, picking up affectionately some of these terrible insects from off the glasses of our headlights, declares with a broad smile:

"What a wonderful thing! All the different kinds are here! A real entomological museum! Look at these fine wings of black gauze on which the light tracing is like the shape of a lyre. It is a *stegomyia*, which propagates yellow fever! The little three-pronged tube which we see belongs to the *anopheles*, whose sting transmits the virus of malaria!"

The impetuous naturalist pauses before our rueful faces.

"Don't be alarmed," he goes on to say, giving his ample neck a vigorous slap, which must have disposed of six victims at least. "The bacillus of yellow fever only develops in maritime regions. It is unknown in the Tchad district, and the *stegomyia* is quite harmless here. As for the *anopheles*—well—well—it is a very rare thing to die of malaria!"

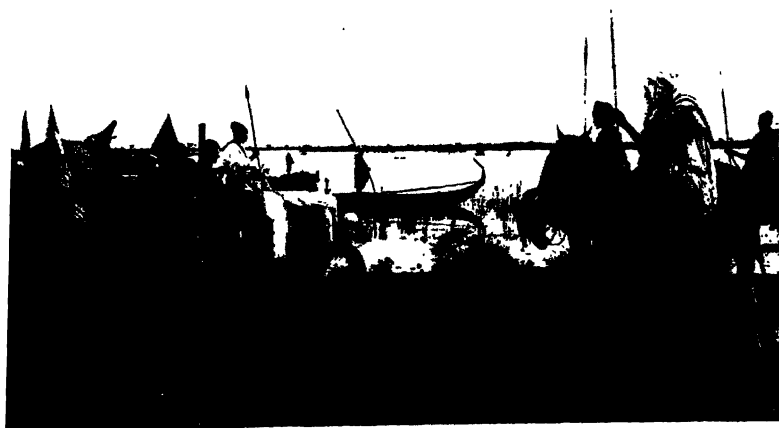
After this reassuring remark we seat ourselves at table. Fortunately the inventive faculty of the mechanics is without bounds. They turn all the projectors concentrically toward the sky, above the tables, which are thus protected by a dome of light, where the mosquitoes whirl to and fro, describing a countless multitude of tiny luminous trails. Beneath this protecting layer of light we have a little peace.

Our appetites are good; then very carefully everyone tucks in his mosquito curtain and goes to sleep, lulled by the murmuring of these millions of wings.

Next morning a general exclamation breaks out on all sides. Rabaud and De Sudre are unrecognizable! No doubt their mosquito curtain had become torn, or untucked, while they were dreaming they were debating with that infernal Bergonier the question of his eulogistic comments



Crossing the high grass-covered plateaux separating the "Kori"



Arriving on the shore of Lake Tchad

on the stegomyias. However this may be, their faces and hands are all swollen up and they are suffering terribly.

We double the dose of fifty centigrams of quinine, which we take every day as a precaution, and make haste to leave these inhospitable quarters.

We go farther toward the northeast and pass by the little station of Rig-Rig.

After again finding some *kori*, we catch sight of the fort dominating Mao, the capital of Kanem, just when a family of hyenas slouch by at a clumsy gallop, a hundred yards in front of us, on their return from their hideous nocturnal round.

Some riders on mettlesome horses cross our path; they are armed with assagais and long, flat, lances made of iron; some of them carry old Arab muskets. These warriors have never yet seen an automobile, we may be certain; yet they do not even halt to have a look at us. With a proud carriage of their heads, with fine noses and thin lips, they continue their martial canter through the brush of which they are the masters. Was it indifference? Was it contempt?

"You need have no doubt," the commandant of the station at Mao tells us a few minutes afterwards, "those were Tedda or Kredda horsemen who live on our plains. One of them said to me the other day: 'We do not love the whites. Leave us alone; we will pay you tribute, but don't come near us.'"

Mao is the meeting place of the great routes of communication; four caravan routes cross each other there, and from the top of the terrace of the station we can perceive their tracks through the brush. The eastern goes toward Abecher and Egyptian Soudan, that from the north goes up to the confines of Tibesti, that from the west (the way we had come) indicates the direction of Zinder, Timbuctoo and Dakar. All three of them sink away on the horizon toward

the land of sand and desert. The fourth, the southern route, descends toward a green expanse. In that direction commences a reawakening of Nature fleeing from the winding-sheet of sand which the Sahara casts over her; it is a track of firm ground which will quickly lead us to Oubanghi.

At the end of one day's march fresh scenery appears. We are going through small woods, sonorous with the singing of birds, green valleys, pools where the natives are bathing and where cattle slake their thirst. We halt beneath the thick shade of real trees instead of that afforded at rare intervals by lean thorn-bushes.

After Massakori, the route becomes a superb avenue; here we find a river, or, more correctly a *bahr*. This is the name given here to an intermittent watercourse; in the regions of the Sahara it is called a wadi, and in the Niger colony a *goulbi*. This one is the *bahr* Ligna, which discharges into the Chari above Fort Lamy. We are now only twenty kilometers of excellent road from the capital of the colony of Tchad; this section of our route is the beginning of the great work of laying automobile tracks, the completion of which will transform colonial life.

But we must cross the *bahr* Ligna, and the pontoon, improvised out of two hollowed-out tree trunks, which constitutes the first "work of art" on the route to Fort Lamy, is alarmingly inadequate when we consider the weight of our heavily loaded vehicles. Furthermore, it is the first time they have taken to the water; will they float?

The semitwilight produced by our headlights, in which the black bevy of ferrymen, little instructed in this kind of maneuver, are tumbling about, renders the scene more alarming. The first vehicle is embarked; the two trunks sink in the water which rises to within a half-inch of the top. There is not much to spare, but getting them up the bank occasions some dangerous moments. Prud'homme directs the operation with sang-froid.

"Everything is going on all right," says Maurice Penaud.

Our anxiety lasts for forty-five minutes, which are required to effect this perilous crossing. It is accomplished without any catastrophe, if not without exciting incidents; and by midnight the Gold Scarab, the Silver Crescent, the Elephant and the Pegasus are safe behind the dense border of grass on the right bank of the *bahr* Ligna. Everybody is played out, and we decide to wait till dawn before completing the transport.

The following day, the twenty-fourth of December, we reach Fort Lamy. After passing through shady avenues swarming with a peaceable crowd, we dismount under a large tree where the European colony is awaiting us.

Under this tree, on the evening of the victory of Kousseri, Commandant Lamy died; this victory, destroying the bloody empire of Rabbah, gave France possession of Tchad.

When night came we again lived over that heroic page, one of the grandest of our colonial romance, by reading the admirably drawn up report by Colonel O. Meynier, who took part in the battle twenty-six years ago:

Close to the flooded land bordering the Chari, Rabbah had constructed a palisaded enclosure in roughly quadrangular form, whose approaches were perfectly open with the exception of that from the south. Captain Joalland, in command of the right column (the Joalland-Meynier expedition), was to begin the attack from this side and endeavor to draw on himself the entire fire and attention of the enemy. While this was taking place the center column, under Captain Robillot (the Chari detachment), and the artillery, also under his command, were to operate a movement toward the west, with a view of launching the main attack from that side; lastly, the left column (Captain Reibell, the Sahara expedition) was to make an enveloping movement to the north, so as to cut off the retreat of the enemy.

The commandant ended his instructions in these words,

"Has everyone thoroughly understood? Thank you, gentlemen." He saluted, and the column detached itself in the most profound silence.

The ground was wooded, and covered with thorn-bushes, and so the sections on the flank could only move with difficulty. Contact between the columns was difficult to keep. However, we came up with the first soldiers of Rabbah. A horseman who had gone out for forage saw us and took to flight. The alarm was given. We then arrived almost immediately in sight of the *tata*. At two hundred yards' distance we saw the palisades of Rabbah's camp rising. Some camels passed by at a gallop into the camp, and the next minute a fierce and sustained fire was opened upon us.

We put our sections in line, kneeling on one knee. The bullets came whistling on all sides; from time to time we ordered a volley to calm our excited men. However, the enemy's fire was better directed, and our men began to fall. At last our first cannon shots rang out, and almost at once we heard a terrible crash followed by a violent report in reply. Rabbah was firing his artillery. At this moment I was wounded in the knee and carried outside the battle-field.

Our battery of 80-millimeters, in position eight hundred yards from the *tata* and served by the requisite European personnel, had a fine game. For a whole hour it rained shrapnel on the *tata* and not one shell missed its mark. Finally, the commandant ordered the center column to make successive advances at the double, supported by the artillery.

But our men were from Kouno. They had it at heart to avenge their comrades who had been killed in that district, and there was no stopping them. They rushed forward with their officers at their head against those terrible palisades, from which spat hell fire. They rushed the camp like a water-spout, followed close at their heels by the Algerian riflemen, who had no mind to allow themselves to be surpassed in courage.

Rabbah endeavored to rally his men to a counter-attack; for one moment he succeeded; his men returned to the charge and rained projectiles on us. Commandant Lamy on horseback, carried away by his courage, reached the center of a small group of horsemen. He became the mark of our assailants. A united charge bore him to the ground as well as his four spahis and Lieutenant de Chambrun, his adjutant.

Close by him Captain de Cointet, who was reforming his men, was killed by a ball through the neck, and Lieutenant Kieffer took over the command of his company. Meanwhile our brave Senegalese, who had been taken by surprise for the moment, pulled themselves together and began to advance.

At that moment Captain Joalland with all his men came up behind Rabbah's soldiers and opened against his massed troops a terrible fire which piled up huge heaps of corpses. Joalland took possession of two cannons which the enemy were trying to carry off. From that moment a general panic set in, and the enemy retired, leaving on the battle-field more than six hundred bodies. On our side we had twenty killed and nearly sixty wounded.

All we had to do now was to carry the wounded Europeans to Kousseri. Lamy, Meynier, de Chambrun and Galland were laid out on a lighter on native beds; Lamy was breathing with difficulty. The journey on the river seemed interminable.

At four o'clock, Doctor Haller, who had been unceasing in the most devoted attentions to him, raised himself and said, "Gentlemen, the commandant is at the point of death." Then, a moment afterwards, bending close to his heart, he said, in a voice full of emotion, "The commandant is dead."

In front of us Kousseri, the battle-field, lies beneath the soothing influence of the moonlight. The large stretch of the Chari is sparkling, and the dark shadow of a boat glides

on its surface like a living souvenir; it is the Léon-Blot, which towed the body of the victor to the last shore.

The Léon-Blot ranges itself alongside the pontoon where we shall embark tomorrow morning, for she herself, that old veteran of the victory, the witness and the proof of the valor of the conquerors of Tchad, will bear us tomorrow over the waters of the lake.

THE INLAND SEA.

The propeller of the Léon-Blot thumps beneath us; we make fairly quick progress on account of the current of the river. This new method of locomotion is an agreeable rest to us.

The Léon-Blot is a long steel boat, whose small engines are driven by wood fuel; her crew consists of old native boatmen commanded by a *capita*. They seem fairly easy as to the object of our passage, for though they perform the regular transport service between Fort Lamy and Fort Archambault, the crossing of the lake is not very familiar to them. Some of them have never done it before.

Legend holds full sway: in the middle of the lake there is a very deep hole into which all those who are displeasing to the Spirit of the Wind disappear; the waves are higher than the residency of the governor; the crossing is obstructed by an army of monstrous hippopotamuses. . . . Credulity and boastfulness! For those of our "boys" who have never left terra firma must be duly impressed. They open their eyes wide while listening to the palaver going on in the fore part of the boat, where are the steersman, the engine-room, and the galley. An awning has been rigged aft, beneath which we unfold our beds at night, and our tables by day. Two long-boats, each fitted with a roof like a gondola, are lashed alongside, one to port, the other to starboard.

Counting Poirier, Bergonier and Specht, we are five of us

in all who are directly interested in the different missions entrusted to the expedition, more especially by the Ministry of the Colonies, the Museum of Natural History, and the Geographical and Aeronautical societies.

A native interpreter, answering to the name of Hassen, accompanies us. He has the air of a high priest in his long blue robe.

The flat banks glide past us without monotony, revealing wild glades, trees with a nest at the end of every branch, and shrubs covered over with blue convolvulus.

The reaches of sand are veritable aviaries where, side by side, doze plovers, hazel grouse, black duck, herons, and storks; and crocodiles lie gaping in the sun while tiny birds take from their open jaws the remains of their victims. We kill one crocodile, which is deposited in one of the long-boats.

We stop at Goulfaye. It was at this spot that the Joalland-Meynier and Foureau-Lamy expeditions effected their junction long ago. It was then a residence of the savage Rabbah; today it is occupied by Diagara, a more agreeable potentate, who receives us with much ceremony.

Diagara is quite civilized. Like an American he knows that to wear round spectacles lends prestige. But he has only been able to procure motor-goggles! He invites us with a distinguished air to climb the steps of the tower surrounded by a double enclosure.

We start again. The charm of the twilight gives a romantic turn to Bergonier.

"I shall sleep in one of the gondolas," he says, attracted by the appearance of the long-boats lashed to the sides of the Léon-Blot.

He lowers his bed on the port side. Hassen, the interpreter, follows his example, and takes possession of the starboard gondola; the bridge is transformed into a dormitory, and the night is wonderfully calm.

Only the hollow sound of the pistons of the old engine seems to take count of the passing hours. How many will thus roll away? Suddenly we are awakened by shouts of fear, and a head, lifting up the canvas of the starboard gondola, is followed by a body which bounds on to the bridge. It is Hassen, the interpreter, stuttering words without any sequence: "Crocodile . . . sorcerer . . . spirit of the wind!" On leaning over the bulwarks we understand the cause of his fright: the crocodile, stowed aft in the long-boat, has come to life again and is moving his half-opened, blood-stained mouth. After having his head pierced through this hideous monster has only suffered from a fainting-fit! The two burly stokers have to finish it off with blows from one of the logs of wood.

Notwithstanding, Hassen takes refuge by the wheel close to the *capita*, declaring he has no wish for any more sleep. Besides, the wind has risen, the awning is flapping, and the long-boats are rubbing against the gunwale with a sound of clashing metal.

Bergonier, who has not yet stirred from his gondola, looks out, pale from want of sleep, and with a lantern in his hand.

"I can't hold on any longer," he declares. "The water is coming over the sides; give me hospitality. I shall not be caught again with a gondola and sentiment!"

We get comfortable again, and this time go to sleep.

We sleep so well that it is morning, at dawn, before we perceive that the boat has stopped among great reeds by an unknown bank. At the end of a rope of vine some luffa are hanging over us, that woody fruit whose pulp when it rots forms a fibrous tissue known as vegetable sponge.

The *capita* enlightens us. We are at Djintilo, for the purpose of taking in wood before entering the estuary of the Chari. The inhabitants of Djintilo do not seem very



keen on paying their dues in kind, and the head man of the village wields only very scanty authority. And so the toll of wood keeps us there till close on eleven o'clock. It is true that the woodcutters' axes are nothing but corners of old iron stuck into wooden clubs like the axes of primitive times.

We have time to go on shore and discover in a millet field the jaw of a hippopotamus exposed on a stake. It is doubtless meant as a warning to the lord of the river of the fate threatening him should he take it into his head to tramp about the plantation by moonlight.

When we leave Djintilo the crew of the Léon-Blot numbers one more, and he quite a personage—old Mahamad Lalouel, a Kotoko fisherman, reputed for his audacity and experience. He has already crossed the lake in all its length and breadth three times. The *capita* seats himself beside him on the bow of the vessel, where he holds himself draped like Neptune. His ebony face is framed in an encircling white beard, and his far-away look seems to scan the horizon. Poirier thinks his style is majestic, but Hassen explains to us why our Neptune seems to look out so far ahead; he is nearly blind! This seems reassuring.

Here, as all over the world, it is faith only which can save; the *capita* is of the same opinion; round the tiller he has rolled his Mussulman beads, and, as two creeds are worth more than one, this prudent man places at his feet an iron tray filled with herbs chopped small and gathered at Djintilo before sunrise by a fetishist sorcerer; when mixed by him they act as a narcotic to the most turbulent spirits. The *capita* is forearmed against god and devil; he is a wise man.

Suddenly the river widens; a few minutes later the banks disappear; we are entering the inland sea.

The *capita's* eyes express profound bewilderment. He looks like a good dog on the point of drowning, desperately

clutching at some support. But old Neptune seizes him by the arm. The fresh wind from the open water buffeting his face seems to have given back sight to his eyes; his commanding finger indicates a point on the watery horizon and the *capita*, guided by a blind man, steers the Léon-Blot with a firm hand in the crook of this outstretched arm, which for him possesses as much magnetic infallibility as the needle in the compass.

We are now on the moving expanse of water; the tossing of the Léon-Blot shows us we are on a different element. In the distance there are some islands, but they are islands formed only of papyrus, marsh plants, sagittaria, and float-bushes torn from the banks by storms.

"For there *are* storms," Specht insists, while the rolling of the Léon-Blot assumes disquieting proportions.

The little boat is very frail; Specht has preserved a painful recollection of the Mediterranean; he becomes pensive and goes to the side. The famous gondola long-boats grind against the gunwale. We have to unlash and tow them behind us just as if they were mere old tubs. The beads slip through the left hand of the *capita*; with his right he throws the soothing mixture of herbs into the waves. Hassen explains to us that we are passing over the great hole.

Toward evening the wind goes down.

"The spirit has taken fright," the *capita* concludes.

The red sun sinks into the haze; we leave a very long wake behind us in the water, which has become like oil. In the distance a thin dark band appears; it is an island—real terra firma, or almost. The crossing of the open water is over, and it has lasted only a few hours. For the rest of the way we shall go north through the broad channels of an archipelago. These channels have no depth. The propeller of the Léon-Blot catches in the weeds, and night has already fallen when we approach the shore, parting a way before us through a forest of papyrus twenty feet high.

The sole inhabitants of the island—orthoptera, lepidoptera, diptera and other mosquitoes—come and dance a buzzing welcome around our lights. We reverse the engines and cast anchor in the middle of the channel.

Next day the necessity of making a slight repair to the engine gives us time to land. We feel we must have come to Robinson Crusoe's desert island. A cloud of many-hued birds flies away at our approach. Bergonier has scared them—and with reason—for his merciless gun opens a sustained fire on them and brings down numerous victims.

"Here 'popotamus," Hassen tells us, pointing out little heaps of newly digested grass.

We follow the tracks, but at the end of half an hour all we have killed is a pelican and a young heron. What does it matter? We have had a delightful stroll. Little glades jeweled with flowers and perfumed with mimosa—nature in a pleasing state of wildness out of which one could easily make a garden; we even find stretches of tall grasses resembling fields of ripe rye. We get a delicious sensation of peaceful nature, an intuitive, possibly a profound, echo of an original paradise.

In the distance the muffled sound of the woodcutters at work is followed by the crack of falling branches; our stokers are getting in supplies.

Repeated discharges tell us that ornithology is winning new victories.

A little later when the Léon-Blot sheers off a column of smoke mounts up from the desert isle; the woodcutters have set fire to the dry grass and the birds fly wildly round their fallen nests.

We soon arrive within sight of Fort Bol. Bulky and red it seems to be slumbering. Not a human being to be seen. Suddenly a negro rises above a clump of *arak*; he sees us and moves off toward the fort; five minutes afterwards the flag is hoisted. We land, and are welcomed by the

entire garrison, consisting of a French sergeant, three Senegalese riflemen and their *moussos*.

Three black warriors and their European commander, and that is sufficient to insure peace over a country larger than a Department of France. Prestige of the white man! How long will this influence of civilized men last over Africa, which is beginning to awake from its immemorial slumber? What nations will be born from this present age of colonization?

Certainly the future people of North Africa will bear the French imprint, just as the Europe of today bears the Roman seal. But, like Europe, the African race of the future will doubtless preserve its own characteristics and its own customs born of the climate and the land. If Lake Tchad does not dry up and become a Tanezrouft, as Tilho fears, a bridge may one day join the quays of Bol to the island opposite—anything may happen—and fine comfortable boats may replace the heroic old veteran the Léon-Blot.

At the present day the Boudouma, who were formerly the pirates of Lake Tchad, when they wish to cross the water lay themselves quite naked flat on a raft made of the wood of the *ambach*, and propelling themselves with their arms and legs, push before them their oxen, whose great hollow horns keep their heads above the water like natural floats. It is a simple process, but how long will they be allowed to remain naked without incurring the notice of Article 330 of the Penal Code? Who knows? Perhaps a day will come when Boudouma savants in flannel suits will be seen standing on these same quays poring over strange books, in which they will read accounts of their ancestors, the Boudouma of today, similar to those instilled by a professor of history in the minds of young French pupils: "The Gauls were clad in *bracæ* and *sagum* (breeches and cloak)."

And when that day comes, before what kind of black

areopagus will the President of the Confederate States of Tchad deliver the following discourse? "The noble origin of the Boudouma race predestined it to the rôle of spreading European civilization. As a matter of fact our ancestors were pirates, just like the famous Normans who founded the British Empire, traces of which are to be seen today all over the world. Borne on rafts made out of papyrus reeds called *téï-téï*, surmounted by a curved prow giving them the appearance of war canoes, they launched forth on the lake and, landing by night near the villages on the shore, carried off by a surprise attack the cattle and young maidens. . . ."

With these thoughts passing through our minds while we were leaving Bol behind after a short stay of a few hours, our reverie lulls us to sleep in harmony with the lapping of the water against the side.

"To arms, Specht, here are the pirates!" suddenly cries Poirier, who is scanning the horizon with his field-glasses.

Specht hears him; in the twinkling of an eye he points his glasses to port, where two tiny dark specks on the water can be seen far away. There is no mistake; through our field-glasses we can clearly distinguish the characteristic shape of *téï-téï*. Four men with long poles are straining to push forward these primitive craft, loaded with a heavy booty.

We give orders to the *capita* to turn the bow towards this flotilla, and when the Boudouma perceive this they cease pushing on their long poles and wave their arms, uttering loud shouts. They are evidently afraid of our cutting their rafts in two. We draw near rapidly, and can now distinguish the cargo borne by each *téï-téï*—a large solid-looking packing-case like those generally used in Europe when sending goods by railway. We have arrived within fifty yards. Every field-glass is raised.

What stupefaction! On the packing cases we can read clearly this inscription: "Sent by André Citroën—Paris."

They are the spares which were to be waiting for us at Bol! The official responsible for their dispatch had had news of our change of itinerary and was having them forwarded across the Lake to Fort Lamy. The Boudouma ex-pirates did not conceal their joy at not having to risk themselves over the "great hole."

To receive in the middle of Lake Tchad motor-engines, magnetos and gear-cases, coming straight from the Quai de Javel, and in charge of Boudouma pirates, is a bewildering anachronism, whose strangeness fits in with our reverie!

The return to Fort Lamy is accomplished without incident. When passing Djintilo we land the magnificent Mahamad Lalouel, and after that our progress becomes slower, for we have to ascend the Chari against the stream. The engines of the Léon-Blot pant under their heroic efforts, causing groans to arise from the framework of the veteran. When we reach the village of Douguia, a short distance from Goulfaye but on the opposite bank, a bolt from the connecting-rod flies off.

We anchor and land at Douguia, a little village of Kotoko fishermen. Their graceful canoes, made of planks covered over with sewn skins, are coming in. Behind the canoes two trees, thirty feet in length and arranged in a fork, hold a large net. This can be lowered into the water—and raised by means of a lever. While the fisherman is spreading his net the children, in tiny canoes hollowed out from a tree, dart over the stream in order to beat up the fish, striking the sides of their little canoes in a peculiar rhythm—ko to ko . . . ko to ko . . . ko to ko. . . . And this is why the river-dwellers of the Chari are called "Kotoko."

The catch is a good one—a dozen fish three feet in length; but the Kotoko are certainly not fish-eaters exclusively, for one of them, looking enviously at our guns, makes Hassen tell us that in the village there is a hunter who knows the most likely places.



The "Kolo" dance performed by Kanembou women

He takes us to a hut near which a strikingly muscular black is putting poison on the points of his arrows. A few moments after, we are following him in Indian file through a patch of thick undergrowth. We come out shortly into an open field. Our guide signs to us to stoop, and pointing out a fine antelope at a distance of forty yards, murmurs, "*Katembourou!*"

"*Kobus unctuosus*," feebly protests Bergonier, placing himself on all fours.

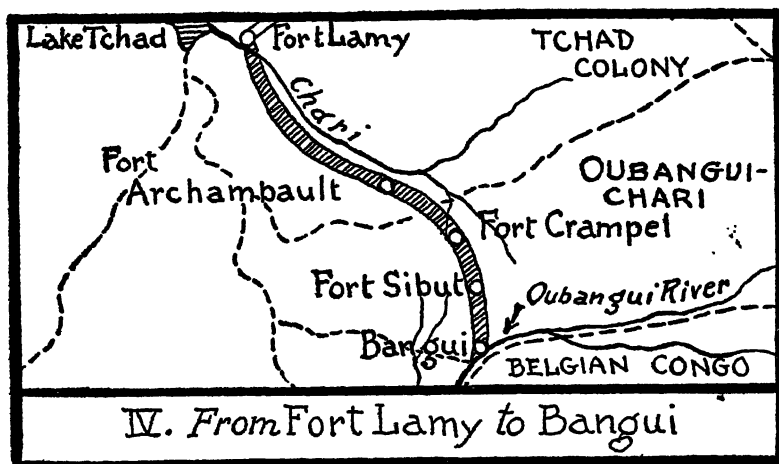
One of us fires from a half-kneeling position. We distinctly hear the ball strike the beast, and he makes a rapid half-turn, swerves and disappears in the long grass.

Suddenly we are charged by half a dozen wild pig, the African boar, which we had not seen. It was certainly an involuntary charge. Taken by surprise they have bolted sharply in our direction. We kill one at pointblank range; the band follows its onward stampede; two shots ring out, and two more boars fall; a third stumbles and tries to rise; our guide leaps on him and cuts his throat with one stroke of his knife; man and beast form a struggling and blood-stained mass. Then the black rises; he has not been hurt at all.

Four wild pig lie on the ground; a hundred yards farther on we find the body of the *katembourou*. Our return to Douguia is hailed with enthusiasm. The fishers will have the meat, for we leave our bag to them, only taking with us some trophies of this short shooting excursion.

On the first of January we are back at Fort Lamy where in sharp contrast we find civilized life again.

Next day the Léon-Blot carries to the south bank of the Chari our eight vehicles, to which a minute overhauling has given renewed life. And when our procession breaks away to bury itself in the growing savanna in the direction of the equatorial regions we watch, not without some melancholy, the old boat turning toward its accustomed waters.



FROM January 3, 1925, our cars going due south proceeded down into the Central African regions.

The nature of the ground allowed a fairly rapid pace; Fort Archambault, the most southerly station of the colony of Tchad, was reached on the 7th of January, Fort Crampel on the 9th. After passing Fort Sibuto, the watershed dividing the Tchad and Congo regions was crossed on the 10th.

On January 11 the expedition arrived at Bangui, the capital of the colony of Oubanghi-Chari, on the right bank of the river Oubanghi.

On the left bank Belgian Congo begins, with which region we made the first junction attained by motorcar on the following day.

Chapter IV—The Savanna

January 3—January 25

THE FETISHIST COUNTRY.

ON the farther bank of the Chari the atmosphere is a new one. We take our first lunch under the shade of thick foliage; our folding tables are hidden beneath a green arbor where birds are chattering. The commandant interrupts our romantic reverie *à la Murger* with an unexpected remark:

“Do you know where we are?”

? . . .

“In a salt mine. In this region Nature does not provide us with the resources offered by the *kori*, and three thousand kilometers separate us from the inexhaustible reservoirs of the ocean. Therefore, in order to procure salt—or a product resembling it—the natives burn these leaves under which we are now having our luncheon; they collect the ashes in baskets of millet straw, which they hang on the trees; a calabash is placed underneath and then they wait for the rain. The water filters through the baskets drop by drop, impregnated with all the salts of soda and potash contained in the ashes; the calabash in this way gets filled with a brackish liquid which, after evaporation, leaves a deposit suitable for flavoring food with salt and for making soap.”

As we go down toward the equator rain reappears, which profoundly changes the aspect of our life in its general outlines and down to the smallest details.

In our foggy West we generally invoke the sun as a creative power and a powerful benefactor. Mistral has celebrated the fair sun of Provence, and Edmond Rostand composed his royal hymn of praise in his honor:

. . . O soleil, toi sans qui les choses
Ne seraient que ce qu'elles sont.

After having crossed the regions of the Sahara one feels fairly disposed to do justice to the rain. The truth is that in the daily work of generation the sun is the male principal, and the rain the female. One can produce nothing without the cooperation of the other. In the Sahara the sun, do what it can to bring into effect all its heating power, can accomplish nothing better than cracking up the rocks in the *hammada*. Here, on the contrary, its rays encounter the fertile humidity, and from their union is born a new life, whose aspect recalls to the inhabitant of the West the summer of those latitudes to which he is accustomed.

The morning which opens upon our first bivouac after leaving Fort Lamy reveals a scene of African savanna which is not unlike the woods of old Europe. Through the leaves the sun projects obliquely great rays into the vapor; a smell of damp grass, wild mint and thyme rises. A tiny blue flower like the forget-me-not is seen under a leafy tree in which turtle-doves are cooing. But at a little distance the outline of a roan-colored antelope destroys the illusion which might recall a country in Europe.

"*Hippotragus equinus*," says Bergonier, pointing out the animal; and a few seconds later the trophy is placed on his car.

Are they perhaps attracted by this fresh skin? However that may be, a moment afterwards our unhappy taxidermist is attacked by a regular swarm of flies. These warlike flies assail us with such fury that they allow themselves to be crushed on the spot rather than abandon the territory they

have conquered. Truly they deserve the name they bear—tsetse—which resembles so vividly the hissing of their wings. These far-famed glossinæ impregnate the inhabitants of whole regions with the trypanosome, the bacillus of sleeping sickness.

Already we are encountering the advance guard of that formidable army which for centuries has forbidden access to the equatorial forest to the stranger. Was it not due to the tsetse-fly that the region we are now entering remained closed to penetration by Islam? Fate seems to make use of the humblest means to fix the course of the greatest events. If the Moroccan, Moorish and Touareg caravans had been assailed, as we are, by serried squadrons of glossinæ, how could they have followed up their advance?

We call to mind a native story we heard at Gaô. Conquered by the Moroccans, the last of the Askia to reign in the Songhai capital had crossed the Niger and taken refuge in the south in the wooded region now called the W. The Moroccan horsemen pursued him thither, but it was not long before their horses succumbed to a mysterious evil. Their dismounted riders organized a camp on the hill of Boro-Koulnia. Besieged by the blacks and decimated by sickness and hunger more than by the assagais and arrows of their enemies, the Moroccans would have perished to the last man had it not been for the tardy arrival of a fleet of canoes sent to their assistance by the Pasha of Timbuctoo.

The few survivors of this tragic adventure related that they had been the victims of terrible spells. They explained the mysterious death of their horses as being due to magic, and the *tarik* of the Soudan still preserve the memory of their terror.

Are there not grounds for thinking that the invisible conquerors of the Moroccan warriors were none other than the tsetse-flies which even to this day prevent domestic animals,

horses, asses, and oxen, from living in these regions? And does not this story make us understand by its striking example why the heart of Africa has so long guarded intact the traditions of primitive life? Thanks to a fly, the forest-dwellers—the original inhabitants, or those deriving from the lost continent of which Australia and Madagascar were the extremities—have evolved in freedom right down to the last century, without having been influenced by the thrust from Asia which overran Europe and North Africa.

From this point the Dark Continent merits being termed the Mysterious Continent, for it is in the fetishist country, rebel to Islam, that the mystery of man's origin is buried, and that one may penetrate farthest into the arcana of human nature.

Our arrival at the village of Mogroum opens up a sudden bird's-eye view of this still little-known world.

Mogroum is inhabited by the Sara-Massa. This race, which farther south on the banks of the Logone has preserved in the architecture of its huts the tradition of an amazing art, still retains in the tribe living at Mogroum the custom of ritual deformations, of which the "plate women" are, perhaps, the most curious example.

The metal plate which the Mogroum women carry inside the under lip is scarcely two and one-half inches in diameter; that which is made to grow in vertically in the upper lip is not as large as a five-franc piece. This, joined to the strip of metal implanted in the left nostril gives to the women quite a special form of beauty, which attains to its highest expression among the Sara-Djingé, another tribe settled between the right bank of the Chari and the Arab district of Salamat.

The plates worn by the Sara-Djingé women are made of wood and measure very nearly ten inches in diameter. They look like the monstrous beak of some pelican of the Apocalypse. The appearance of these unfortunate creatures disfigured in this way is really appalling. This hideous-

ness has given rise to the hypothesis of an ugliness imposed by the Sara of set purpose on their women in order to prevent the Arabs of the neighboring Sultanates of Baguirmi and Ouaddaï from taking them away to be slaves. This hypothesis is hardly likely. It is not for their beauty that the Arabs carried off slaves; besides, the Sara were evidently not thinking of making their women ugly, because there was no reason why they should have a conception of feminine beauty such as we have.

It would seem that we are in presence of a rite based on the obscure beliefs of the fetishists concerning their own origin.

These beliefs, moreover, are not so far removed from the basis of our own mentality that we cannot understand them. Nearly all the natives of the equatorial regions believe that a close relationship unites man to animal. Frequently each tribe has its own totem; that is to say, all its members are related by links of a mysterious ancestry to some animal, and nearly always a fierce animal—a panther, crocodile, or buffalo, from which a man is bound to be born with some evil spirit.

As a rule this archetype is an anonymous monster whose rôle is much like that of the Beast in the mysteries of the Middle Ages. In order to baffle his evil spells it is advisable to appease him by sacrifices or flattery, since it is impossible to overcome his terrible power by any living force. Thus the incomprehensible mutilation of the "plate women" would assume a ritual character, with the object of avoiding the anger of the ancestral monster by perpetuating in the tribe the memory of his aspect.

However this may be, the savage rite takes place at the time of the betrothal when she is a little girl. Doctor Muraz, chief medical officer of the prophylactic section dealing with sleeping sickness at Fort Archambault, has kindly given us some striking details.

It falls to the bridegroom elect to pierce the lips of his

betrothed when she is quite young, five or six years old. The operation is performed by means of long thorns, which must remain in position for several days. These are replaced by wooden pegs, which are changed at intervals; their diameter is gradually increased, stretching the lips until they are transformed into two thongs of skin enclosing a wooden plate ten inches in diameter.

When the women are carrying heavy burdens on their heads in Indian file they accompany their paces to the sound of these gruesome castanets.

As we may imagine, eating and drinking are difficult operations, all the more so because the friction of the plates on the gums causes all the teeth of these unfortunate beings to fall out at an early stage, and they are then obliged to feed on little balls of fermented millet paste.

When they want to yawn the old women who are growing feeble have sometimes to open their mouths with their hands. Their language is reduced to a kind of rumble in which onomatopœic sounds take the place of words.

But the Sara-Djingé women are not bad-tempered; they do not appear to be laboring under any inconvenience whatsoever, and they know one or two of the most undoubted joys of existence: to smoke a pipe, to have a great many children, and to watch the growing millet perched upon some observation post in a tree, where they make excellent scarecrows for driving away small birds. Also they dance, and therefore they must be happy.

At Mogroum we are soon in the midst of a tumultuous din arising from an instrument of music we have not heard before. It is the *balafon*, a kind of xylophone made of strips of hard wood fixed to gourds, which make a sounding-box. The hollow sound of the high drums and the tinkling notes struck on the *balafon* produce a novel kind of music, whose melody is totally different from the Arab airs popularized in our exhibitions by the "Street in Cairo."



A Sava-Diinobé "plate woman"

There is another testimony to the disappearance of the influence of Islam: the Sara-Massa women are almost naked; the men entirely so, for one can hardly qualify with the name of clothing the little skin of tiger-cat attached to the back of their person, the front remaining bare of any covering. These men are of fine stature; one can understand that they are stalwart warriors, and if, as Stendhal alleged, "modesty is only a question of beauty," we can realize why the Sara have not so far discovered the need of concealing their sculptural forms.

A contrast, to which we must accustom ourselves in this land in the throes of growth, is presented just when we are making acquaintance with its primitive life; it takes the jarring shape of telegraph-poles. A telegraph-line follows the track, which is a very good one, by the way.

We are making rapid progress. The solution of the automobile problem in these regions is nothing more than a question of burning petrol. We have to cross, it is true, numerous *bahr* (*bahr* Ko, *bahr* Illi, *bahr* Sara) whose intermittent flooding renders difficult the construction of permanent bridges. But the system of ferries will for a long time be adequate to the needs of traffic. These ferries are made of large canoes hollowed out of tree trunks, and are ten to fifteen yards long; they are joined together by a platform of strong thick planks. A cable acts as guide; two gangs of well-trained ferrymen work the crossing, which is effected without any difficulty.

While we are crossing the *bahr* Ko strange personages are watching the maneuver in silence. They are seated gravely on small stools, their bodies are covered with some red preparation, and ostrich feathers are stuck in their hair. The ferrymen regard them with respect, and when we ask if they are the head men they reply that they are in command of the head men, and that they are the all-powerful "Hyondo."

We conclude they must be sorcerers. Doctor Muraz has made a long study of the manners and customs of the Sara, and when we arrive at Fort Archambault he gives us the key of the riddle: they call by the name of "Hyondo" those who have accomplished the ceremony of Initiation in order to be delivered from the tyranny of the ancestral Beast.

The following are the principal acts of initiation as described by Doctor Muraz:

The young boys of from twelve to sixteen years of age are rubbed over and painted red with a mixture of ferruginous earth and karatas oil. An old man, the chief of the Hyondos, administers this painting with the earth brought in small quantities by each boy. The operation takes place in the brush.

Starting from that day, a period of isolation and mortification begins. The Hyondo will remain out in the open brush for one month among the Sara-M'baye (false Sara), and one year among the Sara-Madjingayes (the very good Sara). He must not allow himself to be seen by the inhabitants of the village, especially by his mother. During the period of initiation he wears a rough tunic covering his head and back, made of bark and dried grasses, which he must never take off even at night.

The Hyondo is always assisted by an Elder, a Hyondo graduate, who protects him by receiving flagellation. This is administered by the head Hyondo, and consists of five or six blows from a rod applied to the flanks of the protector, who stands upright with his hands in the air holding two rods, while the candidate crouches under his legs, which are kept wide apart. It is only at the end of the period of initiation that the young Hyondos will be beaten, and will flagellate each other. The initiation lasts nearly two years. During the first the Hyondo postulant is not often beaten, but during the ensuing year he will undergo the rod daily.

The head Hyondo also instructs the youths in the

knowledge of poisons, and teaches them an esoteric language and special dances. When they execute these they daub themselves over with designs in chalk, which give them a remarkable appearance; in one hand they hold a little tube full of vegetable poisons, in the other the two long rods used in their flagellations. Strings of snail-shells rattle on their backs.

When the period of initiation is over each Hyondo takes off his tunic and hangs it upon a tree; they then give themselves up to hilarious rejoicings.

On their return to ordinary life they form a society bound together by secret ties. It has obscure purposes, which seem to aim at the betterment of the human race, but which very often serve only personal interests and private feuds. The Hyondo hierarchy is not complicated. The protector of the initiate remains a kind of elder, and the young man will be bound to give him absolute obedience under every circumstance.

The head Hyondo holds supreme authority, which he wields with a magical power beyond that of men. The entire sect owes him complete submission, and the slightest infraction is visited by exemplary punishment, even going so far as the death penalty.

What intriguing glimpses of human origins do these customs not open up to us!

In this case, just as in the mutilation of the "plate women," we come again upon the ancestral Beast, with man conquering his individual conscience by the effort of his will, and straining toward an ideal of the meaning of which he is himself ignorant. It is a patient conquest, a severe struggle; the period of retreat undergone by the Hyondos is a striking example of this. When the neophyte casts off his shaggy tunic, in which he has walked on all fours in the brush, and returns to the world in possession of the Knowledge of Good and Evil, materialized in the

science of beneficent herbs and poisons, do we not see in this, in very truth, one and the same expression of the moral concept of every place and every age? Do we not rediscover, in the initiation of the Hyondo, that uninterrupted thread going back from the conscience of today to the limbo of the mysterious antecedents of mankind?

While we are making a rapid advance in the night toward Fort Archambault a shadow looms up in the rays of the headlight of the first car.

Many things are seen on African tracks by the rays of the headlights. Timid hares flee bewildered before the unknown aurora pursuing them, and sometimes fall exhausted, forced on by our caterpillars as by some fantastic greyhounds. We also come across starlings which have sought the sand of the track to make a comfortable bed for themselves; birds of prey with green eyes, and wild animals with red—panthers and hyenas like the one that Poirier brought down last evening with his Lee-Metford.

It is a less dramatic meeting this time; the form waves an arm in cheerful greeting; it is a white man, Maigret.

Maigret is the man in charge of the party carrying our supplies in the Oubanghi-Chari region. A hardened veteran, with a bold spirit and the soul of a poet, he is to prove a valuable guide to us in this region so fruitful in surprises. After our first greetings, he at once wishes to put his experience at our disposal by insisting on our camping in an old hut. The proposal very nearly offends us. To sleep under a thatched roof! We, the great nomads, whose beds every night have been under the ceiling of the stars! Maigret, poet of Africa, you surely cannot dream of such a thing!

"Well, well, just as you like. I, being less heroic, shall leave you your palace and go back to my cottage! Good night!" And Maigret goes off with a Voltairian smile.



Kanembou women with euphorbia branches

Next morning we understand, but rather late. Our mosquito curtains, blankets and clothes are soaked with dew. They are as wet as if we had plunged them in water. This dampness of the forest-clearing at night is a warning sign of the perpetual moisture we are to find in the great jungle.

We reach Niellin. Far off we see the rocky peaks of Togbao where the unfortunate Bretonnet and his heroic companions were massacred in 1897. In a few hours we shall reach Fort Archambault.

Archambault was formerly Tounia, the village from which Gentil set out on his way to punish Rabbah after the massacre of Togbao. The memory of this tragic page is here commemorated by a pyramid, on which are engraved the names of the heroes: Bretonnet the administrator, Captain Braun, Lieutenants Durand, Autier, Pouret, and Martin.

We are greeted by an administrator of romantic appearance. He resembles Lamartine and leads the life of a Jocelyn whose restless spirit has chosen a retreat in a corner of the tropics. His knowledge of Africa is vast, and his conversation is full of charm. He has prepared for us a round of fêtes almost Byzantine in their profuseness—races, contests, and an exhibition of black beauty before which even Brull's eye-glass assumes an inclination of 60 degrees, a sign of his astonishment if not of his admiration.

Afterwards we visit the animals secured by a man sent by the Paris Museum, who had come to this spot to obtain some living specimens. We see two red buffaloes in a stable, a panther, and a young black rhinoceros, which some merry fellow had painted over with white lead in order that it might pass for a white rhinoceros; we end with the bird section, where we see some hooded cranes or trumpeter birds, and a tame old marabou, whose eye looks

full of intelligence, and whose bald head seems brimming over with profound thought.

This learned personage has a genial air; he blinks his eye, apparently inviting us to go with him to some strange nook: we follow him mechanically. His long feet lend to his walk the appearance of an ascetic making a pilgrimage; he skirts the edge of the Chari, crosses a clump of castor-oil plants, and then suddenly, with unlooked-for agility, jumps onto an old ruined wall and disappears behind it. We rejoin him; he is pacing gravely over some flat stones covered with wild plants; it is a secluded place, and doubtless the marabou is never disturbed there. We draw near. Suddenly profound emotion takes our breath away. On these flat stones names are engraved: Administrator Bretonnet . . . Captain Braun . . . Lieutenants Durand . . . Autier . . . Pouret, postmaster . . . Martin, sergeant of artillery . . . They are tombs—forgotten tombs. And the long beak of this philosophic bird seems to us to be pointing out the imposing pyramid standing out proudly in the public square. History weaves crowns for heroism, but man does nothing for the heroes.

Before leaving Fort Archambault another sad spot awakens our memory; it is the place where the body of Hubert Latham, the airman, reposed for a short time after he had been killed June 25, 1912, on the banks of the Chari, during a buffalo hunt. Monsieur Martineau, a colonial administrator, left a moving account of this event, which we here transcribe in token of our admiration for one of the foremost heroes of French aviation:

An hour after midday Monsieur Combescure and I were finishing our lunch in our boat when a canoe going to Fort Archambault, the station we had left the previous afternoon at four o'clock, accosted us. The natives told us they were carrying "dead white man." Much im-

pressed, and with hearts stirred, we lifted up the blanket which covered the body, and Monsieur Combescure recognized Monsieur Hubert Latham; his face was contorted and he had dreadful wounds all over his body.

The owner of the canoe had a letter for the captain in charge of the district of Fort Archambault. We had already seen in the distance the boats of the non-commissioned officers who had left some hours before us, and we had not thought it necessary to make any other arrangements. The first thing to do, evidently, was to send the body to be buried in a cemetery set apart for Europeans.

Half an hour afterwards we arrived at the camping ground occupied by Monsieur Latham the night before, and met the non-commissioned officers who reported the following facts:

At nine that morning they were passing the camping ground when they were hailed by natives who said, "White man wounded by lion." Thinking it strange, they landed, and began to understand by the vigorous gestures of the natives that a European had been wounded.

Two of them, Messieurs Bayle and Truchy, who were the first to arrive, took with them first-aid appliances and made a rough litter; guided by some negroes they started off in search of the man they understood to be wounded, of whose name they were ignorant.

After an hour of difficult progress through the brush and over small streams, they came upon a horrifying spectacle; a European, with lacerated body and with his clothes torn to shreds, was lying stretched out on the ground at the foot of a huge thorn tree. There was no life in him, and the two non-commissioned officers, controlling their poignant emotion, placed the body on the litter to carry it to the river-bank.

Then our guides took us to the spot where the drama had been enacted. We saw a patch of ground all trodden over in the center of a clump of fairly close thorn-bushes, whose branches were broken and blood-stained; here and

there were large patches of blood, and with the help of the explanations given by the only native who had been with Monsieur Latham, we were able to piece together as nearly as possible the tragic occurrence.

Monsieur Latham was carrying a double-barreled William Evans rifle, and had with him a fair number of cartridges. He fired at short range at the buffalo, and his rifle burst. The native had a rifle marked "Oesterr. Waffenuhr Gessteyr," which he at once handed to him, and the buffalo received a second bullet. This we recovered from the body of the animal; it is included among the other things we collected.

It appeared that the buffalo had been fatally wounded by this last shot. The native reports that Monsieur Latham leaned his back against a small thorn-bush as if he were tired. Was this the result of the bursting of his rifle? No one will know; but the buffalo, rising up suddenly, made for Monsieur Latham in a short rush, tossed him several times on his horns—which explains how the branches were covered with blood to a height of three yards—and left him inanimate and pierced through, especially in the right breast. The native added that during this time he had climbed into a tree, and we were able to verify the marks left by him.

In this manner had Fate, by a tragic antithesis, reserved a solitary end in the midst of the African brush to one who had known the homage of the whole world.

AMONG FORMER CANNIBALS.

Shortly after leaving Fort Archambault the aspect of the country changes. The savanna grows thicker, and new species of trees make their appearance. The ground is intersected by deep ravines, and at the bottom of these streams are sometimes flowing through very dense vegetation, the equatorial flora of which is enchanting.

We halt for luncheon in the cool shade. In order to find

a suitable place we have often to chop down the mass of green. The architecture of these improvised dining-rooms is not wanting in a certain originality. The trunks of the trees form columns, and the trelliswork of the roots of certain mangroves rises to a height of several yards. Sometimes the roots on which mold has accumulated stretch out over the water in a network forming an artificial soil, in which the branches of the tree, drawn down by the perpetual moisture, layer themselves in inextricable confusion.

In these little streams the water runs limpid over the débris of vegetation.

"Beware," Maigret tells us, "and do not drink it, for among other pernicious larvæ there are quite likely to be filariæ, little parasitic worms which lodge in the veins, and are sometimes very difficult to expel."

We meet with more assistance than we require in making our little camping grounds, for there are always a few huts by these little streams. They are occupied by "Ban'da," natives of the Oubanghi region on which we are entering.

"We are among the cannibals here," Maigret tells us at dessert, while he is enjoying a mango.

Undoubtedly he likes detailing to us the advantages possessed by this region.

"I am not joking," he goes on; "there are still some among us who remember the time when cannibalism was *de règle*. For instance at Ibenga, south of Bangui, about the year 1903 or 1904, the inhabitants offered up four white men on the occasion of the Fourteenth of July.

"The white men, who were agents for a business house, had given the natives a great national fête in order to inspire them with a love for the Republic. All the forest-dwellers were there in feathers, and monkey skins, their bodies painted red with a mixture of palm oil; they carried their assagais and best jet hurling knives. Everyone had donned gala costume.

"The brotherhood of mankind was celebrated in joyful libations. Notwithstanding this, the organizers of the fête were mistrustful. Behind their backs, slung on their folding-chairs their carbines and bandoliers were hanging.

"Then the little native 'wives,' squatting like good little girls by the side of their white men, quietly took out the cartridges and threw them one by one into the thick grass. While this was going on the warriors were counterfeiting ferocious dances. When the last cartridge had been thrown away the little wives rose with smirks to execute a *pas de ballet*. It was the signal; the Europeans were instantaneously pinned down, and their throats cut. Only one of them, who was very strong, was able to make any resistance; he was a determined man, a regular devil. They grilled him alive; all four were eaten."

"Do the Ban'da still eat the flesh of man?"

"I believe they do, only now they do not boast of it. It is difficult to say whether they prefer the white man to the black. The white man is not easy game to bring down; he is very vicious, and defends himself when attacked, and for one white man eaten hundreds of blacks must perish. But ask the genial Administrator of Bangui; he will tell you that certain native expeditions which were sent to enforce payment of tribute on certain rebel chiefs have never returned. You will notice, besides, that the Ban'da still file their teeth into sharp points, which gives them the jaw of a crocodile, that eater of human flesh."

At this moment Tobo, the Ban'da boy whom Poirier recruited at Fort Archambault, takes away our tin plates, and a smile from his thick lips reveals a fine saw of ivory in his mouth. Baba, who has been following Maigret's stories while arranging our traveling kitchen, wears a terrified expression, and when we tell him we will have him eaten by Tobo if he is disobedient he does not seem to doubt it for a single moment.

In truth, it would appear difficult to put an end in a few years to a custom the origin of which is lost in the long night of instinct.

Can we imagine that by a simple decree, even though it be backed up by force, we can abolish a custom in which men take pleasure? The Americans are not savages, and yet has the dry régime suppressed the drinking of alcohol among them? It has made them conceal it, that is all.

The same thing holds good, doubtless, in regard to cannibalism, and secret man-eating groups in all equatorial regions exploit the totemic beliefs of natural man in order to satisfy their invincible cravings. This is also found in the panther-men, about whom the records of native tribunals provide striking evidence.

The basis of the totemic system lies in the reply given by an Apindjé from Gaboon: "Yes, I killed the man and ate him, but only my muscles and physical force were acting, for I was carrying out the will of my totem the panther."

To create confusion between the feline ancestor and the murderer under cover of a mystic rite, is an easy alibi to offer. In the sect of men-panthers, the native who is chosen to procure the victim covers himself with the skin of a panther, and arms his fingers with claws made of iron in order to leave no traces but those of a savage beast. The victim's wounds present every appearance of clawing. Often the murderer even uses a knife in order to give, by making incisions at suitable distances, a perfect imitation of the rents caused by the claws of carnivorous animals.

"A few days before the event, traces of savage beasts make their appearance near the village of the victim with a view to diverting suspicion, and dissuading the inhabitants from going out after dark.

"The fatal night arrives. The men who have been chosen to do the deed paint their bodies over with the

color and special marks of the animal they represent. Then they glide in under cover of the darkness, enter the hut where the victim is sleeping, seize him with a combined movement, render him motionless with a blow and carry him off.

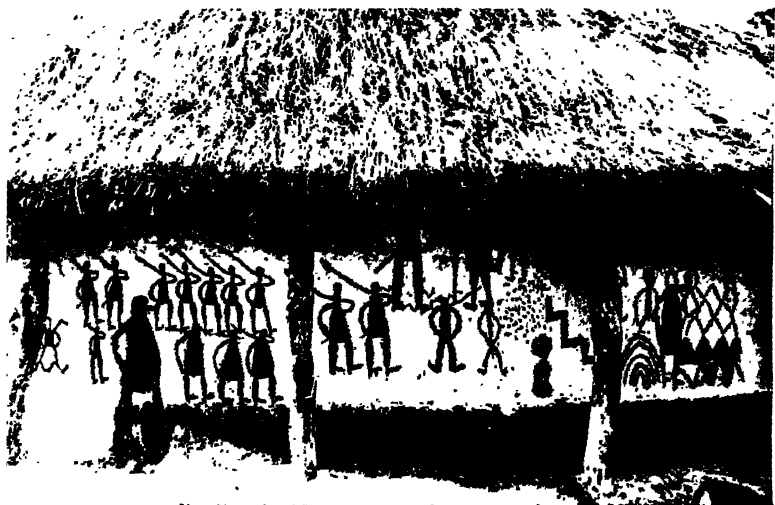
"So great is their dexterity that they can bear off a man without awaking the other natives sleeping in the same hut.

"The sacrifice takes place in a dark corner of the forest, feebly lighted by a red fire. The victim is laid out flat on his stomach; assistants raise the upper part of his body, his head is held back, with his throat exposed. The cooking pot is brought forward in which to catch the blood. The head man strikes with his knife, crying 'Let us rejoice, we have our food'; and each one repeats his words until the red stream has ceased to flow.

"After all present have been regaled with a few mouthfuls of blood the cooking commences in the pot, which has been covered over by the skin off the breast. When the feast is over everyone busies himself in covering up all signs of the sacrifice. What remains of the body is cut up into small pieces, or reduced to pulp by pounding, and then scattered.

"To conclude the ceremony the chief wipes his knife on a piece of cloth woven from the raffia (a species of palm), which he leaves in the pot; this is then taken back to its hiding-place, generally a hole at the foot of a tree.

"Returning to the village the criminals themselves give the alarm. They call for help, declaring that they have seen the panther quite close to the huts. In the general fright that ensues, the disappearance of the victim is discovered. Lamentation and weeping break forth and last till daybreak. The bravest then start out to look for traces of the panther; after a certain time the expedition returns, declaring that it has seen no signs. The charge is laid against the door of the panther, and the drama ends."



Drawings on Ban'da Huts

We do not know if there are still cannibals, but we can certify that panther-men still exist. One day, at Yalinga, whose administrator gave us the concise details we have just read, Poirier wished to film a Ban'da ivory-worker at his occupation, so as to have a record. In order that he might have a suitable light he placed the man with his primitive lathe close by a hut. When all was in readiness the ivory-worker, giving signs of uneasiness, was unable to begin working on account of the trembling of his hands. Questioned by the interpreter he answered in an agitated voice:

"I can do nothing, because I have my grandmother's skin behind my back."

Hung upon the wall of the hut the skin of a panther, killed the night before, was drying!

Poirier had to choose another place where, freed from the malediction of his outraged totem, the panther-ivory-worker wrought all the better because his knife bore a charm in the shape of a claw of his ancestor.

Meantime we are advancing quickly. We have reached the marvelous system of cross-roads intersecting the Oubanghi region. For us it is a symbolic network of branches at the very heart of wild Africa, working all round Bangui, that central point of French enterprise for which we are making.

An automobile service is running in this part of the Oubanghi-Chari, one of the youngest and, without doubt, the most precocious of our colonies. Cars can run at the normal speed of motor-lorries along the route, which already is accomplishing its function of an artery of civilization with excellent results.

The villages, which a few years ago were scattered over the savanna, a prey to sickness and wild beasts, are now grouped along the road. The inhabitants, of their own choice, sit for whole days in front of their huts watching

this road, which is always bringing something new before them. Our passing is hailed with loud shouts of enthusiasm. We represent novelty, the latest phase of these "whites," from whom anything may be expected.

We make very few halts, and those as far away as possible from the villages, for the curiosity of the crowd is vexatious. Nevertheless we have no sooner halted than black forms rise from a corner of a wood. At the end of six minutes there is quite a group watching us and exchanging remarks; Tobo passes them on to us with a smile of pity for his brethren.

"Savage call carriage 'gongolo' because not same as governor's koutoukoutou."

"Koutoukoutou" is an imitative word which is quite comprehensible; but what can "gongolo" mean?

"Gongolo, animal which runs on ground with many feet."

The wood-louse! And *we* call them caterpillars; it is much the same thing.

Farther on another native, who has looked with admiration at the little trailer drawn by each wagon, points to one of his wives, who has her child tied on her back, and then again designating with his finger the trailer, which is a wagon in miniature, remarks:

"That one female koutoukoutou because has to carry little one behind."

There is no doubt that cannibalism develops the observant mind!

Fort Crampel—Fort Sibut. The roads are becoming more and more perfect. We now have sign-posts, and the distances marked—50 kilometers . . . 30 kilometers . . .

The trees stretch up into the sky; there are some reaching a height of 180 feet; these are cotton trees. Na-

ture has provided them with supports 30 feet in height and 15 feet round, without which they would be uprooted by a very slight wind.

We are now crossing small streams on iron bridges . . . 27 kilometers . . . The road looks like an avenue in a forest of some dream domain . . . 26 kilometers . . . We are on the borders of Bangui, on the banks of the Yangana; the spot looks so inviting that we halt for a last encampment.

As we are leaving the road to bury ourselves under the trees, we hear sounds of lamentation and shouts coming from a village, which we soon catch sight of through the trees. A great crowd is assembled in an open space, round a stake to which is attached a man seated on a stool. Are we going to witness some cannibal ceremony?

"What luck!" Bergonier whispers to himself.

But Maigret informs us with regret, "That is only the funeral of the chief."

Ouayendé, son of the panther, is dead. Someone has cast an evil spell on him, for death is never a natural thing. The sorcerer will clear up the question, and will know how to discern if the guilty one be a living man, on whom vengeance must be taken, or an evil spirit to be held in fear. For the moment everyone is plunged in grief.

They have arranged a most elaborate toilet for the dead man; they have painted him red and decorated him with all his elephant-hair bracelets and necklets of shells, and adorned his head with a head-dress of parrots' feathers.

He has been planted firmly on his magisterial stool by the aid of a stake; in his hand is placed a jet knife with many strange-looking blades, a terrible weapon, of which he had been known to make very good use, either in defense or even, at need, in attack; for Ouayendé had been a prudent man; he feared to be killed, yet not to kill. He had been good to his wives; his children were well-behaved.

Ouayendé had therefore all the virtues that could be demanded of a cannibal; Ouayendé was a just man. This, or something similar, is what the mourners are crying in a measured cadence with faces downcast and tear-stained as they beat upon a kind of metal triangle.

After this ceremonial exhibition of grief the body will be carried to the entrance of the village and laid in the ground, for the white man has forbidden burial under the soil of Ouayendé's own hut, as has always been the custom with his ancestors.

To ward off from him the approach of hyenas they will lay over him a heavy piece of wood or stone, and to protect him from the rain they will build over him a little roof of thatch, a miniature hut. By his side, rods will be fixed in the ground with the ends split open and spread outwards, so as to form a little basket in which his sons will come and place an offering of his favorite viands—an egg, thoroughly rotten, bitter manioc, and smoke-dried meat of elephant—for the dead must be appeased. A dead man is always troublesome, even—and especially—if he has been a good man when alive, for he will seek to revenge himself for the bad turn his mysterious enemy has played on him by obliging him to leave the world.

When we return from the banks of the river and again pass close to the village, the women who, shortly before, were weeping in chorus, are now drawn up in line and are performing a riotous dance, frantically agitating an artificial horse's tail fixed to their loins. Tobo, who knows the custom, explains:

“Grief over, women glad, wag their tails like little dogs.”

But he cannot tell us why the women are so joyful; besides, that explains itself—woman often changes.

This village is called Vogpo. It is our last view of primitive life before Bangui, where an hour later we again find a counterpart of European life.

BANGUI.

When we consider that barely fifteen years ago the forest of gigantic trees came as far as the banks of the river Oubanghi which surrounds Bangui, we cannot help bestowing unreserved admiration on these strenuous men who are awaiting us in front of the Residency in this town of flower gardens, picturesque houses and straight avenues of mango and breadfruit trees—this capital of the French colony of Oubanghi-Chari.

The forest was conquered by man. One must have witnessed the symbolic felling of a giant tree to appreciate the greatness of the effort involved.

Twelve men are able to make a combined attack with their axes at the foot of the colossus without getting in each other's way; their arms are raised and lowered without respite, their black and muscular outlines are glistening with sweat, their blows, repeated by the echo, astonish the monkeys, and give them a presentiment of danger. The toil lasts for a whole day, and one has to wait till next morning to see the end of the drama. It is indeed a drama—this struggle of the blacks against this giant, the head of which is towering above the other trees into the sky, which seems to be its own domain. Motionless it puts forth its proud strength, when suddenly a shudder runs through it, and its leaves quiver; nevertheless there is not the slightest breath in the heavy air. Its life is flowing away through the gaping opening under the heavy blows. It oscillates, and a cracking sound rings out, while at its feet the men make off at a run. With a tremendous crash the tree falls in one swoop, dragging with it branches as thick as oak trees which it has torn in its fall from the neighboring trees.

The woodmen, leaning on their long-handled axes, look at it with a victorious smile.

The fallen giant blocks up quite a valley, and when we

pass by a little later, monkeys are scurrying over its broken branches, formerly their dwelling, uneasy at the arrival of man and the coming of new times.

What is there new in reality? Is not the forest always the same, and are not the natives felling it the same as those who formerly trembled within it? But if they are no stronger than before, today they strike *together*. This is what the white men have taught them, and nothing more is wanted to transform a country.

In organizing the native elements lies the work of French colonization, which in this respect is continuing the civilization of Rome, for we repeat here the work accomplished by her consuls on the banks of the Loire or the Seine. On the banks of the Oubanghi, as on the Niger or Lake Tchad, the present may be compared to the Gallo-Roman epoch.

"Take care, you are in process of educating the barbarians," certain admirers of Anglo-Saxon methods of colonization have said to us. "Remember that the barbarians destroyed Rome." This is a mistake; they destroyed the Roman Empire, but Rome has survived, even among the barbarians themselves, in their languages, their arts and their laws.

We have reason to be proud of our colonization work when, after traveling ten thousand kilometers across Algeria, the Soudan, the colonies of Tchad, the Niger and Oubanghi-Chari straight from the metropolis, without ever ceasing to see Frenchmen at work, we arrive at Bangui, the outpost of our territories.

"The Frenchman is not a good colonist . . ." This commonplace is rash chatter when it comes from the mouth of a Frenchman; it is a calumny coming from the lips of foreigners.

The journey we have just accomplished has made us turn over the leaves of the table of contents representing the enterprise of our race. It is eloquent, and those who

are seeking to make Frenchmen doubtful of themselves by treating them as mere dreamers should ponder over the words of that great American, Emerson, "Hitch your wagon to a star."

When one visits the admirable mission of the Fathers of the Holy Ghost, who came as pioneers in the midst of savages forty years ago, when one listens to the words of the man in charge of it, one must bow before the strength of the ideal.

The Bishop of Bangui occupies a small, silent house, a real hermitage at the bottom of a monastic garden quite close to the church. Thirteen years of life in equatorial regions have left their mark on his face, with its rounded forehead like a Saint Paul, but they have not been able to dull the clear light in his eyes, a living reflection of intelligence and goodness.

This Vicar Apostolic of Equatorial Africa belongs to the lineage of Lavigerie and the Augouards. Full of reminiscences, his conversation has an incomparable charm.

When he arrived at Bangui in 1906, the mission was protected night and day by a military guard; it was attacked several times by the Mandjia, who at that period were hostile to European expansion—mysterious attacks by arrows and assagais, the authors of which could not be caught, for they disappeared again into the forest.

There were also wild animals. In 1907 a panther carried off six sentinels from the courtyard of the mission, one after another. The bishop witnessed its capture.

One morning before dawn, as he was on his way to say mass, a lithe form brushed past him and leaped upon the bait placed in the trap in front of the church; he heard the trap shut down, and the beast was a prisoner; it then began to utter terrible roars. The fathers, who were aroused by this bellowing, ran up to get a better view. One of them holding a lantern imprudently put his face against

the bars of the cage; he just escaped having his skull laid open by the formidable claws; he was so taken by sudden fright that he fell over backwards and broke the lantern. At dawn the animal was dispatched with a rifle.

"Just a simple incident in our daily life," concludes the courageous missionary, "and if they are still there, the men who in 1892 built the first station at Bangui, then under full sway of cannibalism and fever, could tell you many other stories like that."

And what encouragement it is in a land built up by Frenchmen to listen to Monsieur Lamblin, that remarkable and modest man who governs it, speaking with authority and insight of its future, which we feel to be so near at hand. The improvement in its river communications, the construction of the railway to Brazzaville, the making of the road to Douala to connect Bangui directly with the coast of Cameroons, the capture of the hydraulic resources, especially the big falls of the M'Bali, and many other schemes, some of which are practically realized at this moment. Even now the route by which we came is carrying rubber, manioc and sesame to Bangui. The town is in full expansion. The natives number twenty thousand.

On the farther side of the river begins the Belgian Congo, and today, the twelfth of January, we have just made the first contact with it by automobile.

A canoe, 100 feet in length, hollowed out of a tree, and manned by fifty men with paddles, takes us to the opposite side, where a cordial reception by the Administrator of Zongo gives the official hall-mark to the junction we have effected.

In the evening Bangui is illuminated, and nothing is wanting, not even fireworks. But now Zongo, in its turn, is blazing with light, and soon the surface of the Oubanghi is reflecting the ruddy glow of a formidable fire. Seeing the fête taking place at Bangui, the natives on the Belgian

side do not wish to be behindhand in celebrating this great day, so they have set fire to the dry grass and a whole hill-side is alight!

"I feel bound to acknowledge that my illuminations were far superior to yours!" the Administrator of Zongo genially remarks the next morning.

TOWARD THE REALM OF WILD BEASTS.

Having now reached the extreme point of our itinerary on French territory, and having realized the first junction with the Belgian Congo by automobile, we are now able to make a stay of some little time in the Oubanghi-Chari region as we did at Lake Tchad. This time the stay is to last for some weeks, for its chief purpose, apart from mineral prospecting, is to organize some hunting expeditions in order to add to our collection.

With a view to finding a greater number of specimens we decide to go back some seven hundred kilometers in a northerly direction, through the districts of Ouanda-Djalé and Birao, on the borders of Anglo-Egyptian Soudan.

The tour is of fairly considerable extent, but this zone proves to be a veritable realm of wild beasts. The Sara and Ban'da natives who inhabited it fled before the incursions of the Senoussi and other slave dealers. As the Senoussi were not overcome until 1911, the country is still very sparsely populated, and the animals dwell there in peace.

In another quarter, we find ourselves on vast plains of clay soil where, during the dry season, the water collects in pools from which it cannot get away, and round these the most varied kinds of animals are obliged to remain for the sake of water to drink.

A well kept-up route will enable us to reach Yalinga quickly, where we shall be close to where the work of construction is going on.

We leave Bangui on the nineteenth of January and retrace our steps as far as Fort Sibut.

It is market day at Bangui, and the natives attend in procession carrying their produce on their heads. The road is wide; nevertheless all these natives proceed thither in Indian file on one single track, defined haphazard by the marks left by their feet. It strikes us as strange that this method of progression, which is quite natural when it is necessary to clear a way in the forest, should be followed in a road where thirty men can walk abreast; doubtless it is the force of habit; but Tobo provides the solution with his broad nigger grin:

"Earth soft for foot when many walk same place."

Tobo is right, but one does not think of that when one is not accustomed to walking with bare feet.

After leaving Fort Sibut we take a fresh route slanting to the northeast. It is quite as good a one as the other. It is only at rare intervals that a small patch of soft ground gives slightly beneath the weight of our wagons; this we easily surmount by passing on the side, for the crossing of a gully, even with a little water at the bottom, is a simple matter of training in the use of caterpillars.

The villages are lined up along the route with a certain regularity, and we always meet with the same scene according to the hour we pass by.

In the damp and cool dawn, when the cocks are crowing, a fire is seen alight in front of each hut, and the village is filled with blue, sweet-smelling smoke. Not far off will be a man or woman crouching down, shivering and holding in the direction of the wind close to the chest, a smoking brand of wood which serves as a warming-pan. All the rest of the village is deep in slumber.

But the sun is rising, and it is the sun which orders the life of the village, for both blacks and whites. The women are sweeping in front of their huts with small bundles of

twigs. The men are cleaning their teeth with the ends of a piece of fibrous wood opened out like a brush. The children rush out with their little bows and arrows to shoot the birds in the Ceara (rubber tree) wood with which every village is planted round by order.

Soon the head of the family takes his seat in the sun on his long folding chair, made of the skin of an antelope or panther, and copied from the long deck-chairs brought by the white men from their country. The old people still use the *krékoï* of a former day, which is a spring mattress made of wooden laths, of relative elasticity. The head of the family watches the rest bustling around; often he begins to smoke; sometimes on a kind of distaff he spins cotton, which is always of his own harvesting in accordance with official orders. The women, bending over a stool, pound millet grown in the field close by, or bananas enjoined by the latest régime, for banana trees, with a few tobacco plants, make up the garden of the home.

The small household animals give movement to this picture—cocks and tiny little hens, and small and extremely mongrel dogs for which the Ban'da seem to possess a peculiar affection, even taking them up in their arms to avoid their being run over as our vehicles pass by.

Iacovleff puts down a good mark in his ethnographic notes to the account of the Ban'da race.

"Why do they love dogs so much in your country?" he asks Tobo.

"Because cook little dog in the earth with banana leaves . . . better much than little pig!" he replies at once with a smack of his lips.

There is no doubt that Tobo has some disconcerting but very clear sidelights on the predilections of his race. After all it is quite logical: the Ban'da, who are experiencing in these days some difficulty about eating man, fall back upon his best friend.

The huts forming the Ban'da villages are now built on a uniform model laid down by the colonial administration. They gain in hygiene what they lose in the picturesque. The former Ban'da dwelling was a circular hole five feet deep, and sixteen to twenty feet in diameter, covered over with a roof of dried grass, the shape of which somewhat resembles the cupolas of the Kremlin.

This excavation, from which there was no drainage and where the dead members of the family were buried to overflowing, soon became a putrid cesspool. Today the Ban'da hut is encircled by a wall of clay up to the level of the ground; the conical roof is very high; it does not rest upon the wall but on a sort of colonnade of wood, which forms a peristyle all round the hut; aeration is therefore perfect. The walls, painted white, are often decorated with spicy drawings. All primitive races reproduce the form of what most strikes them long before they invent writing.

As a rule the Ban'da drawings are not solely of a decorative nature. Sometimes they are allegorical and represent the animal totem of the proprietor—panther, elephant, crocodile; others are commemorative. We saw several showing military subjects, with an officer on horseback—a war souvenir perhaps of some rifleman, for there are no horses in the district. We also saw the governor's "kou-toukoutou." We could never decide who was supposed to be represented by a drawing we saw reproduced several times in one hut—a pot-bellied man on thin legs, in a much-embroidered uniform, wearing a tall silk hat, spectacles on his nose and an umbrella in his hand.

As we are passing through Grimari, Maigret points out to us on a cottage a kind of frieze representing dancing women in ballet skirts, blowing trumpets.

"René Maran, the author of 'Batouala,' was the administrator at Grimari, and this drawing is a repetition of a



The Gan'za

scene from the *gan'za*, a ritual fête of initiation, which he has so vividly described in his book."

The *gan'za* is the ceremony of the circumcision of the young boys. It only takes place every two or three years, for they wait until there are a sufficient number of neophytes.

Has this some distant connection with the Hyondo rites practiced among the Sara? Possibly, but in any case the practice of circumcision seems very likely to be of Mussulman origin. In regions where whirlwind invasions could not take place there has been, nevertheless, an infiltration of Moroccans or Arab traders by the waterways, and it is among the tribes settled along the rivers that the custom of circumcision is found cropping up. The Ban'da in these regions, while adopting the Asiatic practices prompted by reasons of health, may have mingled with them the external rites of fetishism, and the *gan'za* may be the result of this blending.

At Bambari, a little farther on, we had an unexpected opportunity of witnessing these dances of initiation. The cinema has resources not possessed by a book for reproducing such an extraordinary spectacle, and the film in which Léon Poirier portrayed this hellish ballet cannot be replaced by any description. Words cannot equal the actual pictures when it is a question of evoking unknown figures and new rhythmic movements.

Neophytes painted white, the preliminary flagellation, the carrying out of the rite by the sorcerer in the brush, the frenzied dances performed by the initiates wearing caps surmounted by phallic emblems, and the loin-cloths of virility—all this has to be seen in order to understand the frenzy of this sensuous whirlwind, which is prolonged with drunkenness and orgy through the warm night, to the sound of trumpets hollowed in the branches—real forest organs the noise of which attains to heroic discord.

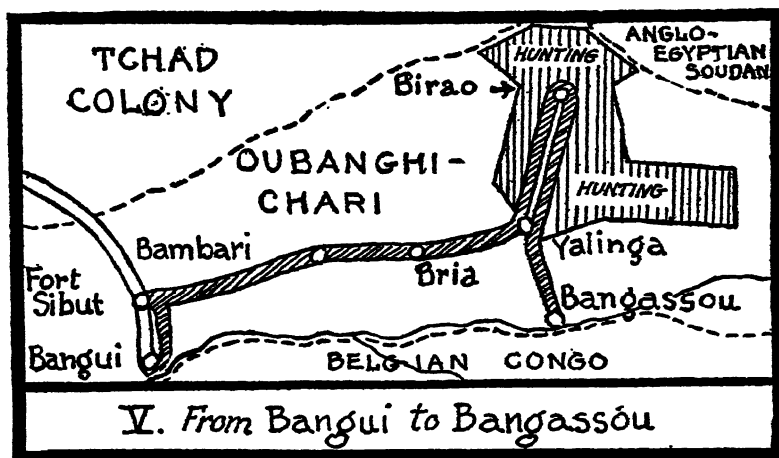
There are the sounds of the flute, the blasts of the trumpet, the melody of the hautboy and the droning of the bassoon issuing from the trunks of trees where two performers have to blow together, until they fall, drunk with exhaustion and *dolo* (beer made from millet). This charivari is not cacophonous; it forms a fierce kind of harmony, sometimes disagreeable like the cries of wild beasts in the rutting season.

The *gan'za* is inseparable from its music, and Poirier has produced a unique work since he was able to note down the sounds while taking the pictures.¹ He had to "westernize" a little—we mention this at his suggestion—in order to write out in a scale of seven notes the themes and chords which his finished artist's temperament, and his wonderful musical memory, enabled him to register; nevertheless the impression given is accurate, the rhythm subjugates and the *Gan'za* film haunts one, just as the echo of that hellish ballet haunted us when we stole away from it in the night.

In the distance a small light shines out; it is the station of Yalinga where the route ceases.

Beyond this the uncultivated savanna begins, the realm of wild animals, of which the *gan'za* might well be the hymn.

¹ The musical themes of African folk-lore noted down by Poirier have been developed and set to music by A. Petiot (Evette and Scheffer, publishers).



THE excellent condition of the system of roads in Oubanghi-Chari quickly enabled our caterpillars to reach the northern region of this colony where some of the shooting expeditions of our party were to take place.

After leaving Bangui January 19 and retracing our steps as far as Fort Sibut, we started again on the 21st in the direction of Bambari, Bria and Yalinga, and reached Birao January 30.

At the conclusion of the shooting tour, which took place to the north of Birao, the expedition returned on the 16th of February to Yalinga, where fresh shooting excursions kept us until the 26th.

On the 27th of February the eight caterpillars resumed their journey to the south toward Bangassou and the Belgian Congo.

Chapter V—Shooting Expeditions

January 26—March 1

FROM AUTOMOBILE TO CARAVAN.

WE SHALL not as yet leave our caterpillars at Yalinga, so as to go slowly through the brush in caravan fashion. We are the first to make use of a track recently opened across the savanna, joining up by way of Ouadda and Ouanda-Djalé, the little village of Birao, two hundred kilometers farther to the north on the frontier of the Senoussi country, now belonging to the Anglo-Egyptian-Soudan.

Only a few weeks ago Yalinga was accessible only by native paths. Traps for panthers set by the side of the huts indicate that savage animals consider this village a hunting reserve. During the rainy season the panther, no longer finding its usual victims in the marshy woods, betakes itself to human habitations, a well-stocked larder for it. By preference it attacks dogs first, children next and last of all men, whom it always takes by surprise in the dark.

From Yalinga to the river M'Bomou, a length of two hundred and thirty kilometers, there are seven hundred natives living scattered through several small villages; ten were killed last year by panthers; one of them was carried off in broad daylight, not far from the men engaged in leveling the road.

"Not very long ago," the Administrator of Yalinga told us, "I heard my door creak in the night under the weight

of a wild animal, and in the morning I found the imprint of its claws in the wood."

The wild dog, with spotted coat and powerful jaws, nearly related to the hyena, also inhabits this region.

Elephants are not rare in the immediate approaches to the station. They come of their own accord to the fields of millet and manioc.

The African elephant has been celebrated in Europe since the days of Hannibal, and Flaubert has portrayed it in a masterly manner in "Salammbô"—receding forehead surmounted by large ears—the movements of which express anger or fear—long tusks, and great height, such as one can still see on the frescoes in Rome and especially on the signs in mosaic in the Forum of Corporations at Ostia.

During the Latin period the elephant lived in North Africa, but it has been so ruthlessly hunted that it has gradually retired to the wildest parts of Equatorial Africa. It has become rare in the districts round Lake Tchad, but it was still found in the islands of the lake a few years ago.

A reasonable and fair system of hunting would not be harmful to the preservation of African fauna. We meet at Yalinga some fine sportsmen, true gentlemen of the brush, who hunt big game in the only proper manner; but the high price of ivory on the European market has aroused a feverish cupidity. Like the land of El Dorado, the region is infested with adventurers. Not themselves possessing the pluck to hunt, they encourage the natives to kill animals of all sizes by any and every means, even by setting fire to the bush. Even young elephants are not spared, although their tusks, called "escravelles," have only a secondary commercial value.

Half-breeds, former Arab traders and unauthorized persons of every description are banded together to bring about the disappearance of the elephant from the French colonies.

On the other hand in Belgian Congo, and the English

colony of Kenya, effective surveillance and the creation of big-game reserves are beginning to give appreciable results. These checks, however, are driving back the contraband practices into French territory.

At Antwerp there are sold each year fifty thousand tusks, representing the killing of twenty-five thousand elephants. When we reckon that the female requires a period of gestation lasting twenty-two months, and that it takes an elephant twenty years to grow into an adult, we can calculate the time when the race will disappear.

"If you had come twenty years sooner," Maigret tells us, "you could have shot elephants on the road. They followed the tracks and used to come and rub off their parasites against the telegraph-poles connecting Bangui with Krebedje. Every day we had to plant fresh poles and repair the wire; there were not enough men to do the work!

"I killed one from my veranda. He came to see me across my plantation.

"I used to go elephant-hunting habitually, taking with me a few blacks who knew how to hold a rifle. One day we came upon a troop of fifteen head, females and young, but a fine male with tusks weighing forty kilos (about 90 pounds) excited our covetousness. We crept up, we waited, we crawled through the grass. At last I succeeded in putting a bullet into the old fellow somewhere by the ear. I had an Express carbine with no recoil-absorber, which struck me hard; cramped, and in an awkward position, I was thrown on my back by the recoil. My blacks fired off their guns with shouts; the elephants trumpeted and charged. What a scene of commotion! I saw one of the huge animals reach one of my men, named Boro; the rest passed by me like a cyclone, crushing everything in the way under their enormous feet; the ground trembled; there was no time to be frightened.

"Boro had fallen on his knees, mechanically holding his

rifle over his head. The elephant seized it with his trunk, tore it from his grasp, whirled it round, stamped on it and went on.

"Boro was stupefied with terror. The barrel of the heavy rifle was twisted at right angles, and the stock shattered. As for Boro, he had no further wish to go elephant-hunting. 'White man cut off my head sooner!'"

We listen to these hunting anecdotes while Bergonier catches winged night pests with the aid of a lamp. In spite of Brull, who is getting ready with minute attention the preliminaries to his mineral prospecting, and of Iacovleff, who "only kills in self-defense," these hunting reminiscences hold as many listeners as would love-stories. Besides, are not both equally old?

While we are examining our rifles, Specht is busying himself over his extensive cinema apparatus. We go to bed late, although we must make an early start next morning.

We set off at dawn. The track goes up northwards as far as the Kotto, which we cross. We come across enormous ant-hills. This is not the first time we have seen the dwellings of these famous African ants; their voracity respects only rock, metal and certain woods (such as that of the *ronier*), which are too hard or too fibrous for their mandibles; but we have never seen, nor shall we, for that matter, see again during the rest of our journey, such monumental ant-hills as those in the Kotto district. They reach a height of twenty-three feet. Constructed of ferruginous earth and clay, they are so hard that an ax is required to lay them open.

At the first blow an army of fighting ants emerges from each opening of the passages going down to the subterranean citadel where the queen lives. The fighting ants have small bodies and large heads, and mandibles like Chinese dragons. They attack the assailant straightway, and a few bites give us an idea of the appalling suffering

endured by those unfortunate beings who, in days gone by, were bound hand and foot in an opened ant-hill. The mandibles of the fighting ants of the Kotto district are real little pincers.

It is curious to observe the evolution of each individual grade, in harmony with the communist organization of the ant-hill. As the fighting ants know only how to fight, their mandibles grow to huge size. The working ants have to go and look for building material, and water for the inner reservoir, through long subterranean tunnels, sometimes over a considerable distance; and so their smooth and wingless bodies have strong and hollow feet. The young males have wings which they drop, with their illusions, when the nuptial flight has been accomplished. As for the queen, inasmuch as her fate is to lay eggs, Nature has endowed her with a soft white belly as large as the little finger from which issues a little head like a pin and feet which are so short that they are always in fruitless motion without being able to get a grip of the soil.

Thus by communism Nature herself destroys her own handiwork, and in order to set society going turns those who compose it into monsters.

As we emerge from a wood of strong-scented manzanillas we see the fourth wagon suddenly stop.

This is the Winged Snail, piloted by Piat, and carrying Specht and some of our gear. A group forms, which we quickly join. Specht has placed himself in battle array and is pointing with his finger to a spot in the brush: elephants!

"There—don't you see them! The big one has tusks weighing fifty kilos at least. Look! The small one is moving its great ears!"

"Look out, it is going to charge!" says Maigret sarcastically, with his hands in his pockets.

But Specht has such burning conviction that he impresses



us and makes us all share it. Even the placid Iacovleff, with his field-glass to his eyes, is beginning to pick out the pachyderms among the mass of vegetation. Maigret, however, still remains skeptical.

"This is too exciting!" cries our intrepid cinema operator, and creeping forward like Gustave Aymard's Indians, he glides toward the monsters.

Alas! It is a cruel disillusion. They are leaves shaken by the wind!

This is our sole hunting experience on our way to Ouadda, a village situated among mango trees and cactus, on the banks of the Pipi, a charming river.

However, there *ought to be* elephants in this district. As we were coming here we met parties of natives carrying ivory tusks on their heads, although some of the tusks were under regulation size. On arriving at Ouadda we hear that a native soldier has just been wounded with assagais, by the Kresh—Arabic-speaking poachers from Darfur in English territory. One of our party bathes the unfortunate man's wounds; he has fourteen altogether, on his head and limbs. The wounded man is lying on a *krekoï*, while his wife laments. Our medical appliances enable us to dress his wounds thoroughly. Boiling water is required. A fire is quickly lighted in a corner of the hut, the water is getting hot, but the man's wife will not let it boil.

"You see," she said, while pointing to the bubbles rising, "all the good in the water is going away!"

The wounded man answers our questions in his vivid language. Suddenly attacked by a group of seven Kresh, he fired, and saw two of them fall; then his rifle would not go off because "cartridges bad." They ran upon him with their iron-tipped lances, which are sixteen feet in length, in order to "hamstring elephant."

When we ask him if there are any elephants in the district now, he replies:

"When see lion, there are always *tetel* [antelope]; when see Kresh, always elephant."

After leaving Ouadda we cross over a formation of rocks. Under these the natives used to take refuge during the slave-raids. We penetrate a few yards into these excavations, which are very deep. Numerous traces left by lions and panthers indicate that perhaps this hiding-place is not uninhabited. We are not very keen on an encounter in a cave where it would not be possible to fire, so we do not persist. Baba faithfully follows us and does not cease pouring out prudent counsels. Suddenly he utters a cry of alarm; we have just time to see him disappear. We rush after him; some stones have rolled down from under his feet, and the frightened boy is clinging to the edge of a hole with vertical sides.

"It is a hole to catch panther," he stammers. "See if there is one inside!"

A little farther on we have our first shot, at a kind of wild pig; it is a strange-looking animal with a vague likeness to a young boar, with the hair of an antelope. Tobo thinks it as succulent to eat as the flesh of a dog. But to shoot a wild pig when we are after the largest animal in the world is not much satisfaction. We continue on our way without enthusiasm, increasing our speed to catch up with the wagons, which have gone on ahead. We come upon the group halted. Maigret says:

"Specht, elephants!"

But Specht wears an indulgent smile. "No, no! I won't believe you this time."

Suddenly a sound of breaking branches draws every eye to one spot, and quite close in front of us a gray mass rises up from the green verdure a hundred yards away.

Specht pounces on his apparatus; others seize their rifles. Maigret looks on at all this feverish haste with an indifferent eye. Iacovleff, perched upon his wagon, pencil and

sketch-book in hand, takes stock of this unexpected model. Happily the wind is in our favor. An elephant, standing motionless, watches us and flaps his ears like a punka.

Hardly has Specht finished his preparations when the elephant turns round sharply and disappears into the forest. We hear the cracking of branches getting fainter in the distance, and we look a little shamefaced. Maigret breaks the silence.

"The surprising thing is that he did not make off sooner!"

"This is not hunting!" grumbles the commandant.

"This is not the cinema!" ejaculates Poirier in reply.

And then for the benefit of those who had not had time to see it, Iacovleff dashes off in his note-book a rapid sketch of our first elephant.

For a whole day we proceed without seeing a man. It is a wooded district, with deep streams and an uneven track. Animals are becoming more and more plentiful. Fairly often we catch sight of antelopes, blue fallow deer, and droves of wild boar, and we notice that they all allow themselves to be approached by our motorcars to within a relatively short distance.

They do not stir even when we pull up, but watch with curiosity these strange monsters; though if we get down, or even if we stop the engine, they make off at top speed. As the same thing happens regularly we conclude that our caterpillars, with their smell and rumbling, at first sight appear to the denizens of this country like some huge new kind of animal, with which they may be able to become acquainted. When the engine stops and the sound of the dreaded human voice reaches the uneasy antelope, and when the passenger sets foot to the ground, it suddenly recognizes the terrible form of that ferocious being who spits out death-bringing fire with a crash.

Only experience can teach hunters the arts of stratagem; the discovery we have just made often enables us to ap-

proach the most ferocious animals without taking any special precautions.

As we are passing through a little wood of thorn-bushes at the close of the day the head of a giraffe is outlined above the trees, the blossom on which it is cropping just as if it were a grass-plot. The first wagon enters the wood, but is soon obliged to stop on account of the thickness of the bushes. The giraffe, at a distance of sixty yards, has not stirred. The engine is going slow. There is a report, and the gigantic animal bends on its knees.

The man who fired the shot rushes forward; the giraffe straightens itself up and takes to flight; its hoof is broken and it will not go far. The pursuit is of only short duration. A second shot, and the tall body falls to the ground in a little clearing.

Our day's hunting has seemed brief, but night is upon us; there is no possibility of skinning the animal then, and Bergonier will not leave the skin behind at any price. We decide to leave three of our wagons on the spot, that of the man who brought the giraffe down, the taxidermist's, and the one in which Iacovleff is riding. The others are to continue on their way to *bahr* Ouandja, where we will meet them again.

"Be on the watch," Maigret remarks. "You are in a spot where lions are likely to be, and your giraffe is a fine bait."

To reach Ouanda-Djalé we must traverse the wild region of the Bonggo mountains, which rise to a height of forty-two hundred feet. On the other side the plain, which is bordered by volcanic-looking shapes indicating the mineral zone, changes its aspect completely. We see again the low-standing savanna which we knew in the environment of Fort Lamy.

The inhabitants of Ouanda-Djalé are Mussulmans, it is easy to see; the huts are made of dried clay as at Maradi or Madarounfa.

By the time the wagons which were kept behind come up with the others, the commandant has gone ahead with the Elephant to reconnoiter the track, which is becoming more and more primitive; but the deep gullies in the Bonggo mountains present other difficulties to us.

On leaving Ouanda-Djalé we are attacked by tsetse-flies to such an extent that we are obliged to put on gloves and protect our faces with gauze; it appears that the tsetse is very prevalent in districts where wild animals abound.

Twenty kilometers farther on we see Bettembourg's wagon. The commandant meets us, rifle in hand. His brisk walk announces that he bears good news.

"Bergonier, get ready your knives!" he cries.

He then shows us near his car the body of a hideous beast with formidable fangs, which slightly resembles a hyena; it is a wild dog, a rare zoological find, which few museums possess.

These animals inhabit Central Africa within a very small radius. Their ferocity makes them very formidable, and the natives go in terror of them.

"Same thing lion," says Mammadou, the black cook, who is on the commandant's wagon; he is still trembling as he relates the adventure to the other boys.

Mammadou alleges that these wild dogs are capable of bringing down a buffalo, when driven by hunger. They keep together in bands of from six to ten. An administrator from Bangui informs us that he was pursued by them under most dramatic conditions.

"Mammadou had heard at Ouanda-Djalé," relates the commandant, "that several bands of these formidable animals were roaming about around the village, and when we left he seemed very glad. He held my rifle in his hand so as to be able to pass it to me on the slightest alarm.

"Suddenly, a hundred yards off, four brutes started up and stood quite still—wild dogs! Their tails, with a tuft

of black and yellow hair, were beating their flanks in quick jerks.

"Mammadou's face assumed that clear gray tint which represents pallor in a black. He passed me the rifle with feverish haste. Prud'homme, without losing his presence of mind, slowed down the engine to stop the car.

"Under the lessened vibration of the engine I aimed my Lee-Metford, which was resting on the bonnet, and the sharp report brought back a wailing echo. All the dogs bounded away into the neighboring brush. I was going to get down to finish off the one I had wounded when the trusty Mammadou clung to my arm, saying in a frightened tone:

" 'You want save my mother and I will not let you get down.'

"The car moves forward. A fresh group of five dogs comes in view. I fire, and this time a male dog is lying across the track. We rush toward the brute from which a still more fetid smell arises than that of the hyena. Mammadou, now reassured, has resumed his fine ebony color.

"Isn't the wild dog an evil brute, Mammadou?" Bettembourg finishes, turning toward the cook.

"You killed it, commandant," answers the black, "but it was I who saved your life. If you had got down just now, the dogs would have eaten you all up, from your cap down to your boots! When you are with us blacks, everyone regards you with awe, but if you go among the wild dogs they eat you up, even to your gold braid! Hi! Hi!"

And Mammadou, now quite pleased with himself, turns round grinning all over his face, to which his pointed skull and broad jaws give the appearance of an enormous pear.

Not a sign of a dwelling is seen throughout the fifty kilometers of wild brushwood separating us from Birao; however, we see once a negro dancing in the middle of the track.

"It isn't a negro; it's a monkey," says Maigret.

The animal is standing on the trunk of a tree and appears to be waiting for us; it is a fine baboon, whose family has taken flight into a thick clump of brushwood. Like some heroic defender of its household it remains there to cover the retreat and to take stock of the enemy.

One of us has his rifle ready; he hesitates.

"Remember that you took it for a man," says Iacovleff.

The shot is fired, and the brute falls to the ground. We draw near to the body, which is lying in the grass. A hand is clenched over its breast, and a trickle of blood issues from the corner of its lips, its eyes are half open, and we think we read reproach in their dying gaze.

Iacovleff makes a rapid sketch of our poor lower brother, whose head is resting on its folded arm.

A few hours later we are at Birao. It is almost night, under a sky in which the young moon is rising over new Mohammedan surroundings. In front of their huts draped women are disporting themselves, and improvised troubadours are giving tune on the *n'gombi*, a kind of Egyptian-shaped harp, the five strings of which are made from the hair of the giraffe.

The lord of the village comes forward to greet us. He is clothed in Oriental costume, and the light of a lantern makes his face appear still blacker in contrast with the white folds surrounding it.

He is the Sultan Marabout Aïm-Gabo, a former Senoussi lieutenant, a rabid Mohammedan and protector of the Kresh. On his wrist is a string of beads, and by his side a saber—quite an imposing figure.

Each of us goes to bed in the straw hut which has been reserved for him, and next morning we begin preparations for our farther progress by caravan. We are to proceed on foot to the marshy lake of Am-Dafok, where we propose to plant our hunting camp.

We shall utilize the old method of African transport, namely, the *tippoy*.

The *tippoy*, a kind of sedan chair, is composed of two long litters on which is placed a cross-legged armchair covered by a little round roof like a gondola. One fares very well in it if the *tippoyeurs* are well trained and know how to step with the care necessary to carry a pitcher full of water without spilling a drop; but if it is a question of entire novices the pitcher has every chance of being empty after five hundred yards have been traversed.

One can imagine the condition of the traveler who is obliged to go for several hundred kilometers in a *tippoy*.

These contrivances require two gangs of four men accompanied by an overseer. It should not be considered that these *tippoyeurs* are mere beasts of burden; they are very proud of their calling, from which they derive both glory and profit; and so we do not fare so badly.

Moreover, several of us have been able to procure mounts, either mules or lean horses. Donkeys will carry the heavier baggage, for the rôle of porter is less distinguished than that of *tippoyeur*. As the load of each porter cannot exceed forty-five pounds, we require more than one hundred men to transport our camp equipment, provisions and cinema apparatus.

In addition, we shall be accompanied by eight Arabic-speaking elephant-hunters in the pay of a certain Malik, and commanded by Gadem.

Gadem and his men seem to correspond in every way to the idea we have formed of the famous Kresh. They are armed with a long lance of flat iron, the traces of which the unfortunate soldier of Ouadda bore in his body; they prance about like Cossacks; as for Gadem, he is a type of the brigand of the time of Ali Baba.

Iacovleff cannot resist the pleasure of doing his portrait and that of the sultan. The sultan accedes to this with a



*The hunting camp at Am-Dafok
From left to right: Commandant Bettembourg,
Georges Marie Haardt, Louis Audouin-Dubreuil*

very bad grace, for by the law of the Prophet it is forbidden to reproduce the features of the human face; after the sitting, Aïm-Gabo goes away furious, without even looking at the drawing, as all Iacovleff's other models are in the habit of doing. This exhibition of bad temper, together with some glances exchanged with Malik, and the conversation of the latter with the illustrious Gadem, causes us some perplexity.

The 135 men of the *safari*, or hunting caravan, are got together within forty-eight hours, and the rations are distributed; on the following morning the long file starts out from Birao toward the northeast, zigzagging through the brush.

AM-DAFOK.

The charm of traveling in *safari* fashion is great. It recalls memories of our ancestors. We give extracts of the cinematographic notes made by Léon Poirier on the impressions which we all experienced.

On the Am-Dafok track, Feb. 4, 1925.

Tippoy

The footsteps of eight flat feet are padding over the gray dust of the track through the brush.

We might call it a little house walking along on legs; I am seated in the little house; I watch the regular motion of a porter's back and the flat knife hanging to his elephant-hued loins.

A silent swaying to and fro. . . . Heat. . . . The smell of the negro. . . . Drowsiness. . . . The noise of branches catching. . . . The sound of grass being pushed aside. . . . The brush passes by.

The sun is sinking.

The long caravan under the light of the moon. . . . White in the open glades. . . . Night in the undergrowth. . . . Procession of shadows, shadows of the

past: *Tippoys*, sedan chairs, horsemen with assagais, armed men, porters, rough peasants loaded with boxes and wearing apparel.

An owl is hooting as in the past. . . .

During the first day we kill a few antelopes of differing varieties, and numerous birds. At night we form a bivouac in an open space, in accordance with the practice of the brush, more often in a clearing that has been made by recent fires. The view opens out through the leafless bushes. In a huge circle, in the circumference of which fires are lighted every twenty paces, the natives are grouped; our beds are unfolded in the center, and our weapons propped up against a makeshift gun-rack made out of branches. A tree serves to hang our clothes upon; we have to suspend our boots on a branch in order not to find in the morning a snake concealed in them for warmth.

We rise with the sun. The departure of the caravan takes place in some turmoil. The porters are arguing about their loads. There are some laggards whom Maigret and Specht, who are riding behind, vigorously round up.

We see few wild animals; they have reason to hide themselves at the approach of a convoy of one hundred and fifty men.

Specht, whose enthusiasm for hunting has not been quenched by his mistake over the elephant, searches the savanna with a keen look, and frequently questions his companion in front of him:

"Maigret . . . Maigret . . . down there . . . look, a buffalo!"

"No, no, Specht! It is no different from yesterday and the day before; it is an ant-hill."

"Ah! but this time I'm sure of it; it really is one!"

"Well, then, go and see for yourself!"

Specht starts off at a gallop and comes back rather crest-

fallen, but all the same with the light of faith still in his eyes.

"Maigret, the buffalo . . ."

"What? . . . Was it an ant-hill?"

"No, it was the trunk of a tree . . ."

There is one person who persists in seeing animals where there are not any, and in refusing to look at them where they are: this is Gadem. With his riders he scouts ahead through the brush, or round our flanks, and comes back with a noble air to give us an account of the presence of elephants either more to the left or more to the right, and of how little hope there is of our being able to come up with them.

When he comes to see that this perpetual chapter of accidents rather surprises us, he returns from one of his reconnaissances holding in his hand triumphantly something brown which there is no mistaking.

"Dung, still fresh!" exclaims the experienced Maigret. "The troop cannot be far off."

Gadem remains impassive, and explains that he must go on beforehand and examine the traces of the elephants, rejoining us afterwards by the swamp at Koundouma, where we expect to make our midday halt. When we have received his report we can start off again with him and leave the rest of the caravan.

This seems a prudent course, and as Gadem appears confident of the result we agree to meet him at the swamp of Koundouma.

We settle ourselves under the shade of a huge green tree overhanging the marsh; we cannot see the water on account of the high grass. The prospect in front of us might be like the view over Sologne, or Brière, were it not for the sight of some *Latania* palms rising here and there.

After we have lunched we shoot some aquatic birds—

herons and pelicans—while waiting for Gadem. He arrives at four o'clock, and in polished but roundabout phrases, explains to us the flight of the elephants eastward and his powerlessness to come up with them.

Maigret grumbles, declaring:

"This man is no poacher, he is a gamekeeper; he wishes to prevent us from diminishing the Kresh preserves.

"Gadem, the sultan spoke of you as being one of the greatest of hunters. He can't know you very well, for you are not capable of coming up to the animal after you have discovered its traces."

The blow strikes home; Gadem draws himself up with an offended air.

"Give me five days," he says, "and leave me alone with my men; if I do not bring back proof that I have killed the elephant you may then say that I am no real hunter."

Our minds are already made up, and not caring to utilize the services of Gadem any longer, we generously grant him the liberty he requests. Before taking his departure he dispatches two of his men to find water for his horses; they soon return and lay at our feet a fine python, thirteen feet in length, which they have killed with a blow from a lance just when it was going to dart upon them.

"This is an omen!" exclaims Maigret. "You will see that we shall now have greater luck."

And as if to prove him right, one of our number without having to disturb himself brings down, at a distance of two hundred yards, a big cat which was going toward the marsh in the evening mist. It looks like a panther, but is a tiger-cat of great size. A very rare find.

We camp at Koundouma, and next day in the afternoon at last reach Am-Dafok.

Groups of antelopes are grazing around the swamp, or rather on the swamp, for it gives the appearance of a vast meadow with muddy pools of water here and there.

"*Tetel!*" triumphantly shout the natives, pointing out flocks so numerous and so peaceful that we look mechanically for their invisible shepherds.

Tetel is the native name for the Jackson antelope, which is extremely abundant in this region. Relatively easy to approach, this game will form a valuable accessory for replenishing our *safari* with fresh meat.

A little group of palm trees (*Borassus* or *Latania*) from which we can see over the whole extent of the marsh, strikes us as an excellent observatory and an agreeable spot for our bivouac. Here we shall realize for a few days the inexpressible charm of life in the brush.

We each choose our tree and make ourselves comfortable in accordance with our tastes and occupations. Maigret builds for himself a shelter out of palm leaves; Iacovleff plants his easel in the shade, and soon all our interesting trophies of the chase will take their places successively before him. The cinema has its studio; Bergonier, his laboratory, where boxes of arsenical soap form an imposing line and cause much uneasiness by reason of its proximity to our kitchen. Our excellent taxidermist, whose devotion is inexhaustible, is good enough to concern himself with the kitchen, and his boys, with equal nonchalance, take up alternately boxes of arsenical soap and boxes of butter.

Nevertheless, we have a good appetite for dinner. Night falls; silence broods over the solitude, but it is of short duration; soon the yelping of the jackal breaks forth, then the cry of the screeching wildcat, which the hyena mocks with a burst of evil laughter; then, as if to call the world to order, a hoarse and deep note rings out; it is the roar of a lion! After this, all becomes silent once more, but on the outskirts of our camp the fires blaze up, projecting brilliant shafts of clear flame. The natives have understood the meaning this time; they will not all go to sleep again.

The following morning we approach without difficulty a herd of *tetel* while Specht turns the handle of his apparatus. Three antelopes remain stretched out on the grass.

Poirier, in concealment on the right, sees the whole herd go by him at a heavy gallop over a narrow little path, where the animals pass in Indian file under the fire of his lens. There are more than three hundred.

Whether by instinct or terror they follow each other exactly. The whole file stops if one of them slackens speed, without any seeking to get in front of another. Poirier then shows himself, and draws near; the pace of the procession grows quicker, but not an animal changes the direction of its course. This is not due to the ground, which is hard; in a few bounds they could disappear into the long grass. We soon become aware that this open prairie must have formerly been a hollow depression filled with mud; the elephants have left imprints two feet in diameter and three feet in depth; these are veritable pitfalls, very close to each other, in which an antelope would inevitably break its fetlocks. Their flight in Indian file was therefore a wise maneuver.

In order to explore the savanna it seems preferable that each of us should go off in a different direction. As we are passing round the marsh on horseback, before separating, we notice a gray stone standing in a rustic enclosure made of the trunks of palm trees; it is a tomb. We dismount and go inside the enclosure. There is a cross, and an English inscription graven on the stone:

*In ever abiding memory of
Hugh Drummond Pearson
D.S.O. R.E.*

*President of the Wadai Darfur Boundary Commission
Died Dec. 28th, 1922.*

Lieutenant-Colonel Pearson fell in the heart of the brush, when he was working in the interest of peace. There he reposes in silence, absolute silence disturbed only by the beasts of the wild. Our emotions are deeply stirred, and it is with slow footsteps and without uttering a word that we pass on, after a few moments of recollection beside this solitary tomb.

We continue our way separately, and meet again at the camp in the evening. We have each made an abundant bag; several kinds of antelope make up the picture: bubal antelopes with flat foreheads like the hinds we find in tapestries, koba antelopes (*adenola kob*), marsh antelopes (*katembourou*, our guides call them), reed antelopes, which the natives call *bouchmat*, springboks, impalas and a kalao, the bustard's bird friend and one of our former acquaintances.

But here comes Bettembourg with his trackers. At his side Bergonier is making eloquent signs from a distance; behind them is Kantou-Bama, who looks after our campfires at night, carrying in his arms an enormous bird with its wing broken; its plumage is black and yellow, it has a long red beak, a fierce eye and hooked claws; it is a stork, to whose foot Kantou-Bama has attached a long cord for safety, which Brahim-Nielli, the tracker, is complacently holding as if it were a handcuff fastened on the wrists of a criminal.

Kantou-Bama takes the stork to Iacovleff's studio, but the bird is decidedly a bad character, for it precipitates itself on our friend's box of water-colors. It would doubtless have made havoc among them if it had not suddenly found itself opposite to a small mirror before which it stopped dumfounded.

After two days of shooting we have killed thirty large animals of all kinds; the laboratory of the taxidermist looks like a charnel-house. On the trees skins are hanging

to dry, on the ground are lying pell-mell hoofs, horns and bones. Bergonier is exultant; all day Moussa has his hands plunged in the arsenical soap and spreads terror among the cooks.

All this dissecting causes an appalling smell, not the least discomfort of which is to attract the vultures, which incessantly hover about. Wild animals likewise keep roaming around us; lions even importune us during the day; a tracker saw two a few hundred yards away from the camp.

One morning, after having heard his roaring during the night quite close, we see the "King of Beasts" at a distance of not more than fifty yards from our protecting line of fires.

It would be interesting to secure a lion by day in order that the hunt might be filmed. Bèlès, a tracker skilled in the pursuit of wild animals, successfully enables us to see a lion and a lioness gliding through the tall yellow grass, but the distance is too great. Following the tracks we discover their lair in a bushy thicket, from which a few palm trees stand out. A careful watch through one whole day proves fruitless.

We then try another method, and take up our position in a hiding-place at 3 A.M., in the hope that on their return from their nocturnal roaming they will stop at our bait, a dead antelope.

It is a long wait; dawn comes without any sound of their roar. Nevertheless, something is attracted by our bait; it is a magpie! Then birds of prey arrive from all quarters of the horizon, and soon the antelope is covered by a compact mass of vultures, falcons and marabouts. In less than an hour only the carcass will be left. On the following night the hyenas will come and crush up the bones; insects will clear up the crumbs left over from the feast.

A fresh hiding-place is decided upon, but this time we



The result of a morning's hunting

shall pass the whole night in it. Everyone lies down on his bed fully dressed to take a few minutes' rest. We get up at midnight. The moon is still high; the porters take our rifles; the little column steals away in silence.

Our place of concealment is a platform built upon stakes and hidden by the reeds. The natives lay down the koba for the bait at a distance of ninety feet. Then they go back to the camp, and the long wait begins. The moon is sinking in the west. Suddenly we hear a roar coming from a distance of a mile; it approaches nearer; we judge the distance by the gradual crescendo of the deep note: three-quarters of a mile . . . one-half . . . but the beast halts. There is another roar in the direction of the camp. A second lion is roaming round the men and horses.

The moon is now touching the horizon. The pool of water which has been gleaming in the light, becomes gradually darker. A leopard passes by a few yards from our platform; we let him go away; it is not for him that we are on the watch tonight. Soon another roar rises to the south, much nearer this time. Then profound silence. We have the sensation that the lion is approaching; but will he be visible in the dark night? A shadow creeps forward. Should we fire? The shadow stops. It stands up uneasily; it is going to run away. At that moment two shots flash through the obscurity; there is a prolonged roar in reply, it goes away toward the south, grows fainter and ceases.

Next morning Bergonier finds the still warm body of a magnificent male lion stretched out on the dry grass. He has fallen with his face toward the camp whither he was making his way with a dying instinct for battle and vengeance.

The camp has now been at Am-Dafok for a whole week. Our food is beginning to run out. Antelope liver makes an excellent dish, the roots of the palm supply us with delectable hors-d'œuvre, but we have no more salt or sugar,

or coffee or tea. We still have a few biscuits left, and a small supply of preserved food; for some time we have had no other drink than the marsh water rendered aseptic and filtered.

We decide to break up our camp tomorrow morning.

A last shot brings down a hippotragus, called *abourou* by the natives. Some of them absolutely refuse to eat the flesh of this animal; these are fetishists; their sorcerers teach them that the meat of the *abourou* is fatal to men. The black Mohammedans in mockery of the "savages"—for so they dub their fetishist brothers—have for their dinner an *abourou* as big as a mule.

Now next morning, just when we are about to start, some of those who partook of *abourou* are seized by strange uneasiness, and soon are writhing under an appalling attack of colic. Panic spreads, and the disorder becomes general in the twinkling of an eye. The porters leave their loads where they are and disappear with cries of dismay. In order to reestablish confidence Bergonier and Maigret rush forward. Maigret stumbles on a metallic object which has been left near the fire among the remnants of the feast. Picking it up, he exclaims:

"Parbleu! This was bound to happen! They have drunk out of the old tins of arsenical soap!"

It is quite true.

"Moussa! . . . Moussa! . . . Quick, the ipecac!" cries Bergonier.

A few seconds later the genuine sufferers are relieved, while the others are radically cured. Is not the fear of ipecac among the ignorant the beginning of wisdom from all antiquity?

After a delay of two hours the safari, burdened with all our hunting trophies, again takes the road to Birao. But we increase the pace and make only two bivouacs en route, one of them being near the Maï-Stour marsh, where we

did not stop on our former journey. Specht arms himself with a string at the end of which is fixed a bent pin, and fishes for some silurians; these are doubtless without experience, for an adventure of this kind can never have happened to them before.

Then a personage we have forgotten reappears; it is the illustrious Gadem with his troop of horsemen! They arrive at a gallop through the brush, and Gadem, without uttering a word, detaches from his saddle-bow the tail of an elephant and the end of a trunk—trophies quite recently cut off.

THE BAHR OUANDJA.

Whatever be the charm of traveling in safari fashion, it is a satisfaction to us to find Brull again, our doughty crew of mechanics and our tireless little caterpillars. Our joy may be compared to that of a traveler returning again to his friends and his home.

We are informed that hippopotamuses have established their headquarters in a marsh situated a dozen kilometers from the point where the Ouanda-Djalé track crosses the *bahr* Ouandja.

After accomplishing in our cars next morning a greater distance than we had been able to cover during three days of safari, Commandant Bettembourg and Brull go off ahead for the purpose of making a cursory examination of the minerals in the mountainous region of Ouanda-Djalé. We establish our bivouac on the banks of the *bahr* Ouandja.

From there we start off on foot behind a tall Sara. This giant with one bound leaps over streams twenty-five feet broad and can go seven kilometers an hour without hurrying himself unduly. Gadem follows and appears to have decided to take his revenge on the hippopotamuses.

We halt a kilometer from the marsh. The hippopotamuses are there. Maigret and Poirier, one with his rifle

and the other with a small cinematographic apparatus, advance nearer, creeping through the brush. The wind is propitious; the huge beasts are cropping the rough meadow-grass by the edge of the water; when thirty yards off Poirier raises himself and presses the catch of his apparatus. . . . The machinery clogs. This is regrettable, for the spectacle of these powerful animals moving about in complete freedom is not without its grandeur.

They have regained the marsh; without taking any precautions we are able to go right up to the edge, for the hippopotamus believes himself to be in complete safety when he is in the water. He plunges beneath the surface and comes up regularly every two or three minutes to watch his enemy and to yawn, opening wide his formidable jaws.

Now is the time to fire. There is a great commotion! The monstrous animals sink down precipitately amid a splashing of blood-stained water. How many hippopotamuses have been hit? We shall have to wait twenty-four hours to know this. By that time the dead bodies, swollen by the rapid decomposition of the marsh-grasses on which the enormous beasts feed, will come up to the surface. At the end of the day two floating balloons are already on the surface of the marsh.

We must bivouac where we are. We cross a flat space covered with brown grass and gilded by the setting sun; impalas are bounding about in this fairylike scene. Alas! the necessity of eating compels us cruelly to disturb their happiness with a shot; a cry from the wounded beast is its reply, and Gadem picks it up a little farther on. Thus our evening meal is assured.

One of us goes back with some porters to the camp to fetch blankets and some strong cords with which to drag the hippopotamuses to the river bank tomorrow.

A few bunches of dried grass as our bed, a good fire, the kettle singing, the pleasure of bathing in the clear water of

the *bahr* Ouandja, the satisfaction of eating what one has shot and of smoking one's pipe, the feeling of contentment on going to sleep after the fatigues of a day spent in the sun—these are wholesome hours in which man retempers his being at the sources of simple happiness, and for one moment forgets the cares which “progress” brings in its trail.

At dawn we are at the edge of the marsh. Three hippopotamuses are floating on the top. They were killed yesterday on the farther bank and have drifted over to our side during the night. This is curious because here there is no current and no wind. Shortly afterwards we notice some rents on their thick skin, and the natives explain that the living hippopotamuses always try to get their dead comrades out of the water, and push them with the aid of their formidable jaws. This would seem to show that the instinct of these animals drives them to escape from the baleful contamination of dead bodies.

The hippopotamuses have thus begun on their own account the work which the natives will complete, but the hardest part still remains to be done—namely, to drag the victims up onto the ground—for each one of them weighs tons.

Gadem and his men are the first to enter the marsh, with their long lances in rest, ready to repel any counter-attack by the survivors, which is always possible. Our forty porters rush into the water and hurl insults at the hippopotamuses; their threatening muzzles appear on the surface for a moment, but they are soon put down again by a few rifle shots.

Fastened to long cables the bodies, swollen like great leather bottles, are hauled onto the bank. The blacks pull vigorously, for they know that the flesh will be their portion.

The cutting up is begun at about eleven o'clock; at three

o'clock it is over. The natives, covered with blood, rummage about in their gaping bodies, already exhaling the odor of putrefaction; while cutting them up they stuff themselves with large pieces of fat. It takes a dozen men to carry away each head; the others load themselves with the feet and a great quantity of meat, which they cut up into long strips and hang on the branches of a tree to cure in the sun.

Bergonier busies himself with satisfaction in the midst of this carnage; no doubt the specimens for his collection possess no smell for the convinced naturalist; but Iacovleff turns sick. However, as extremes meet, they both decide to spend the night by the hippopotamus marsh in order to study their nocturnal habits. The natives allege that the hippopotamuses, after one of them has disappeared, leave the spot where the drama took place the same night, and go to another marsh, lamenting beneath the moon.

We wish the observers good luck and return to our caterpillars on the *bahr* Ouandja.

The scientific curiosity of our two comrades provides them with a night which is fruitful in excitements. Hardly has darkness settled down when a concert of hideous cries begins to resound. The blacks disappear in terror, with the exception of the trusty Moussa, who shares the zoological enthusiasm of his master.

The moon rises, and the huge monsters come out of the water and walk through the grass on the bank. The little encampment has prudently been made away from the paths which the hippopotamuses are accustomed to follow. The racket increases. Visibly alarmed by the presence of men, the beasts tramp along with heavy footsteps shaking the ground, and sometimes approach in an alarming manner. Moussa lights three fires. Our two friends will not be able to close their eyes during the night.

On the first gleam of daylight appearing all is quiet



A bag of hippopotamus near the Bahr Ouandja

again; Bergonier rushes to the marsh; the hippopotamuses are still there. He returns triumphantly to Iacovleff.

"You can now see very well that the family affection of the hippopotamus is only another negro story."

"But in that case how can you explain, my dear Bergonier, that these poor beasts were crying all through the night? . . ."

FOLLOWING UP ELEPHANTS.

When we are all together again at Ouanda-Djalé we set off once more on February 16 on the track to Yalinga, where we intend to stay for a few days. In that district, in fact, elephants have already been seen; it would not be surprising if fairly large herds were keeping on the other side of the Kotto and even farther to the south, where it would not be long before the first rains began.

In fact, elephants follow water; in the first place, because they require a great deal for drinking and bathing, and secondly, because water supplies the branches with sap and nourishes the new leaves, of which an adult elephant consumes up to a hundred kilos every day.

We again cross the Bonggo mountains. It is impossible in so savage a region that wild animals should not find a convenient habitat among its inaccessible retreats and caverns, with water always flowing down, with thick woods, green pasture in the hollows of the gullies, and above all, with no men. It is a choice district for animals, and the noble company of buffaloes, elephants and rhinoceros should surely hold court in this "charming resort."

The information afforded by Gadem and the other natives is so far from being conclusive that this time we are relying on our own personal impressions. After a halt in the middle of a clearing we start without any preconceived plan, accompanied only by Somali, our hunting boy, and Baba. The broken branches will show our route.

We cross a small dried-up marsh, on the surface of which the mud preserves many imprints left by buffaloes and elephants; we negotiate several gullies and ascend a ridge perfumed with wild thyme; then we seat ourselves on one of the rocks in a magnificent gorge, and take a short rest. Suddenly a passing bird makes the boy Somali exclaim:

"It is the buffalo-bird; they are not far off."

It is most curious to notice the friendships—interested friendships, it is true—established between different animals. But if men live together is it not often because they find by so doing some advantage to themselves? Thus the *kalao* and the ostrich, the oxen of the Soudan and the birds that pick off the parasites from their backs, the buffalo and his attendant bird.

Somali was right; a black brute with a massive neck and its forehead surmounted by sharp horns is outlined at the entrance to the gorge. We hold our breath; the wind is favorable; the animal moves forward. There is a sharp detonation, and he rears under the shock of the bullet, which we distinctly hear strike him, bellows loudly and then resumes his former position. He has seen the enemy and turns, facing him with anger. His tail whips his flanks, and proudly he rushes forward. There is a second flash; another bound, and he falls to the ground.

We cover his body with branches, and returning toward our caterpillars as the day is declining, catch sight of a herd of buffaloes at the bottom of a ravine. They are drinking, but the wind is against us and it is impossible to get near them; already they begin to show signs of uneasiness at a distance of three hundred yards. We are compelled to fire without much hope, and the entire herd moves off eastward. We follow them up as a matter of conscience, and great is our surprise when after going a short distance we discover a female buffalo lying stretched out on the grass. A bullet has pierced her head.

That same evening Bergonier cuts up the carcasses so as not to abandon these trophies to the wild animals, and when he returns his face is beaming with enthusiasm in the light of the lantern which he holds in his hand.

"Well! those were two fine specimens," we remark.

"Yes, yes," he answers absent-mindedly. "But do you know what I have brought back?"

And taking a match-box out of his pocket he exhibits it on the end of his fat fingers.

"You are not unaware of the importance one should attach to the study of parasites, in order to establish the conditions under which African epidemic diseases are spread.

"I already have an interesting collection of diptera culicids and tabanids, among which is the *nalniga* (*Tabanus africanus*); but this small box contains a fresh treasure, which I was fortunate enough to find on the body of our victims, a hemipterous parasite of the *Syncerus caffer planiceros*, which I have named *Acarus*, or the buffalo louse!"

And with a delicate movement the enthusiastic naturalist slides open the match-box. His smile turns into a grimace, and he remains speechless. The box drops from his hands; it is empty.

"They have escaped!" groans Bergonier, scratching his head in dismay.

We remark that the fugitives cannot be far off. He disappears and returns in a few minutes with his face wreathed in smiles.

"They had settled down just as if they were at home. I could never have thought they could have become acclimated so easily. It is wonderful!"

We wish to offer him a glass of cognac to restore his equanimity after such violent emotion; but Baba declares that the last bottle, which we were keeping in reserve for special occasions, has disappeared. Bergonier then con-

fesses that he used it to fill a jar in which he had put the fetus of a hind.

"*Cephalophus rufilatus*," he said in the simplest manner.

When we reach Yalinga, elephants have been located by Saïd, the head man of the neighboring village of Kobou. The administrator, by agreement with the governor of the colony, is desirous of giving a demonstration of a *chasse au feu* in order that our testimony and the irrefutable records of the cinema may assist in putting a definite stop to this barbarous custom. Thus, for the sole purpose of keeping a record, we are to be present at this impressive but cruel spectacle, very improperly termed a hunt.

After going thirty kilometers safari-fashion, through wooded regions where coffee is growing in a wild state, and the ant-hills seem like villages of Lilliputian pagodas, we camp near a stream in a deep hollow, the dense vegetation of which gives us fantastic surroundings under the ruddy glow of our bivouac fires.

Tati, our chief tracker, "interrogates the fire" and prepares the "witch's wand" which will insure that tomorrow's hunt shall be propitious. The ceremony takes place a little distance from the Europeans, but among the trees it is easy to get near.

Tati, entirely naked, with an assagai in his hand, walks round in a circle reciting a monotonous litany, to which the choir of trackers squatting in a ring give the responses. All at once Tati stops, and bending over the fire puts numerous questions to it; then he plants the point of his assagai in the flaming wood, and watches the way in which the different burning sticks either go on burning, or go out; it is thus the fire gives its message. Tati translates it accordingly, and the choir give joyous or gloomy exclamations as the case may be. It would appear that many elephants, and among them a great bull, are in the Pokoro

Reserve, where the fire is being prepared to burn them at dawn.

Very early next morning we direct our steps to this spot.

The reserve is a great level space covered with high dry grasses, amongst which the elephants generally come to pass the night. As soon as the sun begins to get warm they again go down to the damp shade of the streams, to sink in the fresh mud and bathe themselves. The procedure is to set fire to the grass at points fairly close to each other, so that an uninterrupted circle of fire, fanned by the wind, closes upon the animals and hems them in.

To reach the Pokoro Reserve we have to cross a small forest, intersected by branches from the streams. The vegetation is very dense here; we chop a path with our axes, and the safari makes slow progress. Just when we are crossing a little stream we hear a murmur of confused sounds. The column halts, the blacks listen and quickly recross the water, gesticulating excitedly; their eyes are starting out of their heads. We try to bar their road, but they glide into the brush tearing at their skin. Bergonier leaves the head of the procession and appears, pale with excitement.

"The Bombyliidæ! Run!"

"Bees!" explains Maigret, who was walking fifteen or twenty feet in front, but comes back at a run. "Two of my porters have been stung; we must fly."

The approaching hum of the swarm lends special eloquence to his words. We throw ourselves into the water and retire in haste some hundred yards. Tata then stops and listens. Maigret goes on:

"The bees will not pass by here, for the trees surrounding us do not attract them. By this means the natives can mark out the direction in which the swarm will come, and can get out of its way. It is their only chance of safety. The blacks, who are almost entirely nude, are more ex-

posed than we are. I have seen some of them die within a few hours, after being terribly disfigured and swollen like leather water-bottles."

The two men who have been stung have numerous bites on the back and shoulders. We give them what first aid we can and send them back to the bivouac, but we have to make a long detour to avoid another trying encounter.

The sun is already high when the safari reaches the outskirts of the winding streams. The Pokoro Reserve spreads out in front of us, brown and undulating like ripe rye; it is six kilometers broad and four long.

Saïd is disturbed, for he thinks it a bit late in the day; but it is impossible to go back, and he sends out his men to start the fire. We wait quietly in the shade.

About midday a column of smoke rises in the distance; it is the signal. All the fires are lighted simultaneously; the grass, which is dry and swollen with heavy oils, explodes like cartridges, and projects into the air volumes of black smoke, which obscures the sun.

The fire spreads by these explosions with lightning speed. What Saïd feared takes place: it is the hottest part of the day; and the atmosphere is disturbed with eddies of heat; there is a quick change in the direction of the wind, which beats back the fire as it breaks out with a low roar, against the wall of green where we have taken refuge. The dampness secures our retreat against the fire, but we have the extraordinary sensation of being in front of a wall of flames. The hot air scorches our faces, and sparks fall on our clothes; a shadow like an eclipse makes our faces look livid, and a cataclysmic roar drowns all our voices.

A few minutes pass, and then the fire seems to get farther off, having burnt up everything.

We emerge from our retreat and follow the receding flames. Saïd's men make themselves sandals with large leaves gathered in the thicket. A few antelopes and a

panther jump with a bound over the barrage a hundred feet away from us. It is impossible to fire at them as the smoke has blinded us; our swollen eyes weep tears and cannot distinguish anything properly.

At last we hear a sound of trumpeting; it is a cry of alarm and not of pain. Another rises a little farther off. Saïd shakes his head. The reserve is now nothing more than a wilderness. A few blackened trees and two unfortunate antelopes roasted alive are the sum total of the *chasse au feu*. Tati seems a little vexed.

"Well! well!" Maigret says to him. "Your fire spirit didn't know what he was talking about last night!"

But Tati has faith.

"The elephants were there," he replies, "but they had an understanding with the bees to make us come late. Men can do nothing when the animals combine."

In reality we are very well satisfied at having recorded a first-rate cinematographic picture representing the dramatic sight of the savanna on fire, and at having witnessed the *chasse au feu* without being obliged to assist at its cruel ending.

Being assured by Saïd that the herd of elephants must take its line of retreat along the river M'Bari, we leave on the following morning with Maigret, Iacovleff and Specht, while our other companions and the bulk of the safari return directly to Yalinga.

Our course through the vegetation of the stream land is distressing. The heat on the high ground is overwhelming. During our lunch some monkeys with ruffs—the *Colobus*, our naturalist would call them—come and look at us. Maigret cannot resist the temptation to bring down one of them.

"Bergonier requires a specimen for his collection," he says to justify himself.

Zoology, what crimes are committed in thy name!

At last we reach the M'Bari. After a day spent in looking for the elephants we have not come up with them. They have again escaped us; Saïd is discouraged.

"They have gone now to the south to hide themselves in their big forest."

"Well! we shall find them again there, Saïd, for that is just where we are going."

Forty-eight hours afterwards our convoy of eight caterpillars, now assembled again, leaves Yalinga going toward the south by the track leading to Bangassou.

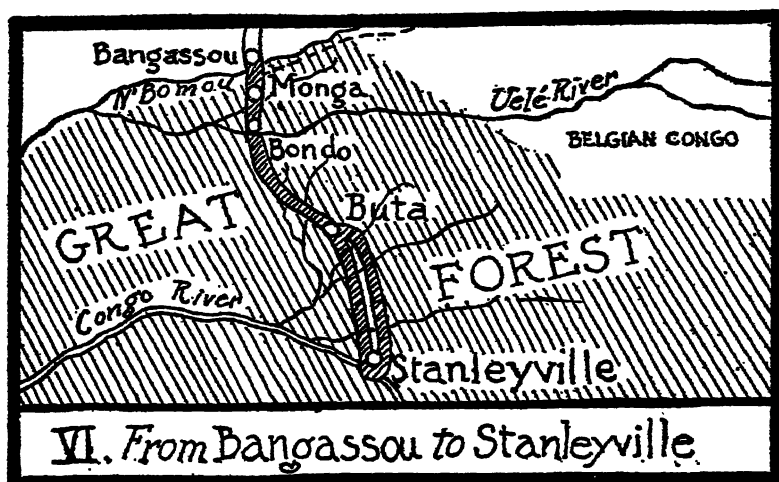
At Yalinga we leave Maigret, whose experience has been so invaluable to us, and whose personality so agreeable.

We also leave behind another helpful auxiliary, Jean Michaud, who after safely delivering our supplies under difficult conditions through Belgian Congo is going to take back to France the trophies of our hunting obtained in Oubanghi-Chari.

One page is now finished: another is about to begin.

The vegetation quickly becomes denser. The domain of trees will follow after the realm of wild animals, and just as the frenzied cries of the Gan'za seemed to us before like a hymn celebrating the unchaining of the instincts, so this evening we hear in the thunder the great voice of Nature, which the echoes of the forest repeat ad infinitum.

Blinded by the lightning, deafened by the crash of the thunder, and inundated by torrents of rain, we are soon obliged to seek refuge in the abandoned huts of a former native village. It is our first tornado, the herald of a new climate.



THIS stage was entirely through forest, and in the territory of Belgian Congo.

It began on the 1st of March, after the crossing of the river M'Bomou, and continued through the equatorial forest, where our caterpillars had to cross numerous water-courses.

Nevertheless, their progress was fairly rapid by way of Monga and Bongo. They arrived at Buta on the 6th of March.

Leaving Buta, four of our caterpillars traversed four hundred kilometers of forest to Stanleyville, the capital of the Eastern Province of the Congo, where the first junction by automobile, which had been officially recorded on January 12 on the Belgian side of the Oubanghi, was celebrated.

On March 19 the eight caterpillars again came together at Buta.

Chapter VI—The Equatorial Forest

March 2—March 22

THE ENTRY.

THE forest is Nature's cathedral.

As man approaches it he experiences in a vague way that fear of the unknown which, according to his stage of evolution, predisposes him to mysticism or superstition.

All the elements and everything else have now a tutelary spirit. The first we come in contact with is the spirit of the river, and we are reminded of this by the offerings of those who fear its power.

At Basso, before crossing the river Zaco, we see a small temple with thatched roof beneath which are laid dead chickens; at this spot travelers come to insure themselves against the perils of the crossing, for the current is rapid. Where the M'Bana is crossed, an egg is put on the edge of the ford for our benefit; it is placed in one of those little baskets hung on the end of a split stick to which we have already drawn attention in the neighborhood of Bangui. Possibly owing to this precaution we are able without mishap to cross over by the ferry rigged upon old canoes, which are very fragile.

Numerous charms are strung on the elephant-hair bracelet, which is one of the most important articles of the Ban'da national costume. A widely prevalent fetish is a hyena's tooth, possessing the power of warding off the blow of an assagai. There is also the piece of wood which prevents children from attacks of flatulence after eating the

broth of fermented millet. Every kind of sickness has a remedy of the same nature, for the sorcerers never run short of charms. Mystery roams the outskirts of the equatorial forest.

The forest, just here, has no very definite outline. One penetrates into it insensibly. Little by little the vegetation of the stream-lands overflows from the gullies and reaches up to the level plateaux.

It is not till we reach Bangassou that we feel we are really entering the equatorial forest. Here the M'Bomou, which joins the Uelé and becomes the Oubanghi, marks the boundary between the French colony of Oubanghi-Chari and the Belgian Congo. After the junction made on January 12 at Zongo, we penetrate more deeply into this wonderful territory, geographically, ethnographically and intellectually—the heart of the African continent.

The M'Bomou is a hundred and fifty yards broad. Under the oil-bearing palms the natives watch our departure from the French side on a ferry-boat resting on large canoes.

The rhythm of the paddles sways the structure in a regular undulating movement, punctuated by the song of the oarsmen. On all the world's great rivers sailors, oarsmen or paddlers have their chanteys, and the rhythm of the song accompanies the rhythm of the movement.

The songs of the African paddlers, whether on the M'Bomou, the Uelé or the Congo, have unexpected harmonies which are much nearer to Western combinations than other native songs. They nearly always consist of a solo by the head man answered by a choir of many voices. We have heard admirable singers and choirs making use of several different canons of almost classical attainments. The words have no importance; they are made up on the spot and combine reflections on nature with praise of the passenger in order to stimulate his generosity.

We cast a last look on the exotic river-bank to which point the enterprise of Frenchmen has advanced the frontiers of France. On the farther bank of the M'Bomou a somber mass forms a wall in which no breach can be distinguished. The trees and creeping plants descend into the water, forming a protecting network across which only the multicolored birds can pass; behind a compact barricade of mangroves is a tiny patch of open water. The ferry-boat grounds on a slope of bare earth, and our caterpillars, gripping this new soil, mount up to the floor of the equatorial forest.

A great calm reigns beneath the thick shadow of a few mango trees.

Monga, the first Belgian station, is sixty kilometers distant. Quite at the outset we see an American missionary, who has come to this distant country doubtless with the sole view of bringing to it the light of faith; his knowledge of hydro-electric power, however, excites the admiration of Brull.

Some natives examine our caterpillars with admiring curiosity. They belong to one of the Azandé tribes, the great race which dominates the whole northern portion of the forest.

In the Azandé is seen the first influence of the Ethiopian migration. It is supposed that Africa, over nearly the whole of which at one time extended the forest now limited to the equatorial zone, was originally peopled by a very primitive race of small stature, which found in the trees a refuge from the many dangers with which it was surrounded. There still remain, in the dense unexplored brushwood of virgin forest, a few families of these aborigines who in primitive times were driven there by two invading currents. The thrust of Islamism did not take place until a comparatively recent period.

The first tide of invasion, which flowed from the high



A gigantic mangrove tree in the equatorial forest

Abyssinian plateau, would seem to have spread as far as the Soudan on the outskirts of the forest, and then in a southerly direction down to the Uelé.

In these regions the natives are in reality of the Ethiopian type, ebony-black, of tall stature, fine features and harmonious proportions; they are bold hunters and when they were first conquered were fierce warriors.

Beginning at the Uelé River the Bantu type is found; this race extends as far as the plains of Natal, from whence it would appear it took its rise. The Bantu are more thick-set and have thicker lips; their skin is bronzed. Less of a fighting type than the Azandé, but also less open in their dealings, they oppose cunning to the virility of the latter. Warfare between them would still continue were it not for the intervention of the Belgian authority.

A few months ago it would have been impossible for us to penetrate the forest otherwise than by the obscure paths of which Stanley so powerfully evoked the haunting mystery and which convoys of porters alone could travel. The caterpillar, which can overcome difficulties in the ground, could not have penetrated the network of creeping plants and thick undergrowth. If we have been able to go down by automobile as far as Stanleyville, within less than one degree of the equator, it is because our Belgian friends have opened up on our behalf a breach seven hundred kilometers in length through this impenetrable mass, combining the efforts of forty thousand natives to accomplish the work in a few months. When we consider how difficult it is to get even one of them to work, we can but admire a result all the more exceptional because the black man does not carry out willingly any work of which he cannot clearly see the utility.

The Belgian administrators very cleverly utilized the approaching arrival of the expedition to stimulate the curiosity of the blacks. They encouraged their perseverance

by telling them that envoys from Boula-Matari were about to come from his distant country, riding on animals made by him, in order to bring them a wonderful message.

The prestige attaching to the name of Boula-Matari is such that not only laborers but whole villages came and took up their position along the track to give us a welcome.

And who is Boula-Matari? It means "the man who blew up the rocks"; it is the name given by the natives to Stanley, who blew up with dynamite a passage for his canoes through the rapids of the Congo. That appeared to the natives to be the most astounding manifestation of the power of a being who had the form of a man but whose white skin denoted something essentially supernatural.

In the eyes of the Azandé of 1875 Boula-Matari was a prophet announcing the beginning of a new era. He came to proclaim to the poor inhabitants of the forest, victims of evil spirits, that henceforth there would be armed white men of marvelous power who would aid them in fighting occult forces.

Boula-Matari came, and then went away. A little time afterwards other white men arrived. How could they doubt for a moment that they had come at his orders? There were captains, sergeants, majors and engineers—all, in the minds of the natives, sent by Boula-Matari. When these newcomers collected rubber and palm oil it was always in the interests of Boula-Matari; when they imposed tribute it was to fill Boula-Matari's treasury.

Today nearly all the blacks who were old enough to have seen Stanley in 1875 are dead, but Boula-Matari is ever living; after shedding his human chrysalis in the course of time, Boula-Matari has become a principle, the principle representing Authority.

Large agglomerations of peoples have grown up, imbued with this conception of power, and it is a fact that in no other part of Africa have we received such an impression

of order, discipline and unity as we have in Belgian Congo.

Thanks to Boula-Matari, the equatorial forest is waking from its somnolence, and in this region, which we might well have expected to find more backward, we have noticed, on the contrary, more active forces for future social development.

Thanks to Boula-Matari, the impenetrable is opening out before us. We offer to him our deepest gratitude, both to him and to his representatives on earth.

It is appropriate that the little Belgian flag should wave by the side of the French flag on our caterpillars as we leave to enter the breach which has been opened before us.

We advance at a good pace. The ground is uneven, there are often trees still lying where they fell, but the road is clear, and our caterpillars do the rest.

At the first village we come to, the inhabitants greet us with the waving of palms, shouting at the top of their lungs: "O lélé . . . O lélé!"

This refrain, repeated all day long by strong, indolent or childish voices, remains in our memory, together with a vision of smiles displaying white teeth, extended arms and frantic rushes behind our cars. "O lélé!" is the national salutation, the cry of peace with which the stranger is welcomed. From one canoe to another the paddlers hail each other with this greeting, and through the dense forest this call of man greeting man rings out. One wonders if the name Uelé, given to the river and this district, is not derived from it. The first explorers very happily gave the designation of "Niam-Niam" to the Ban'da, an imitative sound descriptive of their cannibalism.

Many unfortunate beings, disfigured by elephantiasis, consumed by leprosy, or emaciated by sleeping sickness, drag their bodies to the edge of the track to see us pass by.

But we are not yet in the forest, where the rays of the sun never penetrate. There are numerous clearings, in

which are found banana trees and oil palms; until now we have not seen any gigantic trees like the cotton trees of Bangui.

Night falls before we reach Monga, which cannot be far off. On the edge of the track there are a good many huts, but the black man only gives way to enthusiasm during the day; darkness fills him with uneasiness; only here and there do silent and scared forms show themselves in the glare of our headlights.

Suddenly there is an explosion and a jet of flame shoots up on our right. It is doubtless a gun going off, but the weapon must be some huge blunderbuss, for it is like a discharge of fireworks. We stop; a second discharge, and then a third gives an answer to it. As nothing appears we go on.

Half an hour afterwards we reach Monga, which is all decorated with Venetian lanterns; while the "Marseillaise" and the "Brabançonne," strenuously rendered by a fanfare of native soldiers and embellished with unexpected flats, are ringing out, the excellent administrator asks us with the geniality possessed by the Boulevard Anspach:

"Did you see my lookout men on the track?"

And when we expatiate on the musical training exhibited in the fanfare on the cornets the vigor of which is drowning our voices, the representative of Boula-Matari bursts into loud boyish laughter:

"Come, come! Now that is splendid! My lookout men are not musicians;¹ they are negroes armed with old muzzle-loaders. Last night I placed lookout men at intervals, for five kilometers before the station, in order that I might be warned beforehand about lighting the lanterns!"

After our cordial reception at Monga we continue on our

¹ The administrator's outburst of laughter is explained by the *double entendre* of the French word "pistonnier," which means "a man employed in repairing the track" or "a cornet-player." (Note by translator.)

road toward the river Bili, which we reach when the sun is at its zenith. The heat is suffocating; however, the thermometer marks only thirty-one degrees centigrade, and in the Tanezrouft the temperature was far higher without occasioning us so much exhaustion. The mechanics manfully fight against it and, without taking a rest, set about crossing the Bili on a ferry rigged on canoes, assisted by the questionable aid of a few sickly-looking blacks.

"It will be cooler on the water," Trillat philosophically remarks.

On the contrary, there is no amelioration on the water; the river flows without a ripple between the exuberant vegetation of its banks, which, soaking in the water seem to prolong themselves on to the surface, so green and thickly covered is it. The ferry passes over a sirupy-looking fluid, the color of jade; a vapor rises from it. It is barely eighty yards across; when we are brought to the farther bank we are covered with perspiration, although we have remained motionless, vainly waiting for a breath of air.

The equatorial heat renders a long stay in the forest regions impossible for Europeans. It causes the perpetual germination in the cells of little hard particles which develop a parasitic secretion, eating into all the organs. It would appear that the higher a man is in the scale of civilization the less able is he to resist the unceasing assaults of these hidden enemies. There are few animals in the forest, besides monkeys; the natives can live there only on condition that they open out clearings. Birds are more numerous, doubtless because they can rear themselves above the dangerous zone. Insects, on the contrary, abound.

The ants build for themselves veritable hills. Moss, leaves and the bark of trees form the home of a swarming entomological mass, the sight of which plunges Bergonier into ecstasies. He carries in his caterpillar a whole collection of glass jars in which numberless insects are swimming

about in alcohol. He has ordinary beetles, *cetonia*, hooded beetles, ladybirds and cochineal insects of the color of precious enamel.

We admire them greatly, but give Baba special instructions to watch carefully over a bottle of fine 1906 champagne on which Bergonier is casting an acquisitive look at the end of the meal. The arrival of an unexpected guest happily diverts the perilous attention of our friend: it is a varanus, a kind of large lizard, which tumbles suddenly onto our table. Everyone starts up to pursue it; but the hunters are too numerous, and the game is too good at climbing trees; in a few seconds it has disappeared.

Bergonier, meanwhile, will not be checkmated, for he is holding in his hand a strange-looking insect, which at first we take to be a piece of wood. It is a phasmid, a curious example of that capacity for adaptation given by Nature to creatures too feeble for self-defense. This power of adaptation is a camouflage which removes the animal or insect from the sight of its enemies. As regards color it is a common fact; the polar bear is white in the snow, the crocodile of the mangroves is a clear green, while the crocodile inhabiting ferruginous banks is darkish. The power of adaptation of the chameleon is well-known. But the phasmid makes use of an adaptation of form, of a very varied kind, from the appearance of a piece of bark to that of a blade of grass.

There are also leaf-butterflies which carry this refinement of adaptation so far as to group themselves on a branch where they remain motionless, their folded wings looking like dried leaves. In shape and in the marking of the veins the illusion is complete; but if you brush past this branch, which is exactly like the other branches, the leaves suddenly fly away, like a little cloud of red or blue petals blown at the caprice of the wind.

The flying of these butterflies is the great beauty of the



Crossing a river on an improvised ferry

equatorial forest. They are one of its chief sources of color; for it is desperately green, not that tender green which in temperate regions is the gay mantle of spring, but an Empire green, dark, severe and cold. Without doubt this power of adaptation is also enjoyed by the vegetation, for leaves, flowers, and fruits seem struggling to confuse themselves under a uniform mass.

What mysterious power is it which tends to reunite things which have been split up by the prismatic variety of nature? With the exception of a few kinds of parasitic orchids and the marvelous amaryllis we find in the clearings, we see around us only green. Even the arums, some of which are taller than a man, lose their pure whiteness of innocence and wear a livid tint on the corolla; they also have thorns along the stem.

The equatorial forest forms by its color a tragic setting wherein the actors are invisible. And so it is a joy to the eye to see these butterflies flying in troops through the somber depths, and settling on the banks of the rivers like spots of color on a palet.

Iacovleff naturally loves these butterflies; color possesses a fundamental attraction for him. He contemplates it and drinks it in with his eyes, approaching with catlike precaution.

While everyone is resting before leaving the river Bili, Iacovleff steals off quietly to fetch a butterfly-net from Bergonier's caterpillar. For love of color our peaceful friend has made himself a thief and even a hunter!

For, without offense to you, my dear Iacovleff, a butterfly has as much right to live as an elephant. Nevertheless, we admit very willingly that your hunting is as delicate as ever was the versifying of that subprefect of Alphonse Daudet, who wrote in the meadows. You go off on tiptoe, without making a dead leaf crackle, toward the yellow or green patch of color the thousand wings of which are

palpitating in unison to the rhythm of the suckers breathing in the dampness of the ground. When you get within seven feet without having been heard, you take a long look at your prey, and your gaze has none of the ferocity of a butcher. Even if a butterfly were able to read the look of a man, could the victim you have chosen possibly guess an announcement of its approaching end under a glance so full of love?

And if, by chance, it flies away under the influence of some obscure presentiment, your attitude stiffens. Only your eyes follow its capricious flight, without losing a single turn or missing a single evolution, and they bring back the butterfly by some marvelous power of fascination to the place you wish it to be, where it may not escape your net.

You even push your refinement of delicacy to the point of jealously preserving your victims on little pieces of wadding, in boxes of Turkish tobacco, in order to shield them from the degrading contact of all the promiscuities soaking in the impure alcohol of Bergonier's glass jars.

The latter's methods are scientific. They comprise a series of operations. Armed with a basket used by the natives for carrying manioc or bananas, he throws himself precipitately on the coveted prey, and plunges it suddenly into distressing darkness; then approaching with a firm tread he slips under the basket a pad of cotton-wool steeped in chloroform, and a few minutes later the entire mass of creatures lies inert on the ground without having again seen the light. He can now examine the objects at his ease, and choose the nepticulid or tortrix which has been wanting in his collection.

On leaving the river Bili the head ferryman points out the menacing clouds which are passing over the trees, for here, of course, one never sees the horizon. Then, after mimicking the sound of thunder and the fall of rain, he takes up a wooden whistle hanging around his neck and

begins to whistle with all his might, making great gesticulations toward the clouds.

"He possesses the *félélé*. When whistle with *félélé* no rain fall and tornado go away," explains Tobo.

Whistling against the wind? After all, why not? Has not science discovered gunfire to ward off hail?

It is a fact, however, that this same evening the tornado does not burst; it is almost to be regretted, for it would have lowered the temperature and relieved the electric tension of the atmosphere, which is weighing heavily upon us, to the point of producing lethargy.

The fall of something hard on his car sharply arouses one of us from his somnolence. The projectile is an enormous beetle, larger than a man's fist, its white outer wings decorated with regular lines of a beautiful violet-black. We seize it, not without difficulty, for the animal is strong and its claws, provided with teeth like a saw, are capable of making deep wounds; it is a Goliath, a giant among insects. It usually inhabits the treetops, where it is very difficult to reach. The good fairies have sent us this one.

The undergrowth becomes denser and denser, and the narrow opening is getting smaller. In some places there is barely room enough for a vehicle to pass; we are in a veritable tunnel. Still no animals to be seen. When the engine is stopped, the silence is peopled with mysterious sounds—the fall of leaves, the droning of insects, the call of monkeys to each other, the screech of parrots, and above all, the multitudinous, delicate little tappings revealing the obscure toil of myriads of invisible insects. How natural it is that the imagination of the forest-dwellers should place a spirit under every leaf!

In a region of tall trees the rays of the sun filter through the haze of the morning dew like the shafts of light blending from the tall stained-glass windows of a cathedral. As far as Bondo we have no river to cross, but marshy stretches,

which we negotiate by means of wooden sleepers, and deep gullies, over which light temporary bridges of disturbing elasticity have been thrown.

The ground in places shows but a deceptive firmness; the branches and leaves form a covering which the weight of the caterpillar suddenly causes to give way. Owing to this, Rabaud's car turns over completely. No one is hurt; Rabaud has time to jump, and Poirier is already down; as for Tobo, who sits on the top, he hangs to the branches over his head.

The car acts admirably under the shock; the solid metal body is not even put out of shape, and when once the car is on its legs again the engine starts at once.

But it has been a lengthy job, and around us has gathered a real collection of oddities. These stunted and miserable-looking blacks have appeared without our seeing them come—lame, one-eyed, leprous, and suffering from goiter, a real inferno of human decadence. The most curious specimen is a "white negro," completely white but for patches of reddish brown, with pale blond hair and blinking red eyes—an albino. An albino is a degenerate type.

The white negro is an object of great veneration in these parts. The family to which he belongs at once sees an inflowing from Providence of benefits to its hut in the shape of offerings brought by those who wish to avail themselves of his protection.

We cross the Uelé at Bondo; it is a fertile region as far as Likati, and the large clearing gives a bright note to the obscure monotony of the forest. A road, kept in repair like an avenue in a park, winds among plantations of oil palms. The road repairers have wheelbarrows, and we notice one who is cutting the grass on the paths. The villages run into one another, are clean, and in regular formation. The women are draped in cotton garments of many colors.

The tombs of the Azandé are profusely decorated. Every day in front of the departed one's empty chair, amongst the objects which were once familiar to him, people lay food and drink. A busy throng is crowding round the entrance of the bazaar. A few small brick houses are seen scattered among the huts.

Long hollow bamboos hanging down the palm trees, from the heart to the bottom of the stem, are evidence that water is not the usual drink of the inhabitants of this fertile country; these bamboos are really pipes for collecting the wine from the palm.

We notice factories, prosperous-looking merchants, and quays heaped up with the edible palm. It is a startling transition from the savage isolation of yesterday.

This contrast places in a nutshell the colonizing methods of Belgium, which we may define by the word "sporadism."

BELGIAN CONGO AND THE VIRGIN FOREST.

When in 1884 Leopold II founded Congo Free State, in spite of the opposition of the Belgian Chambers and the greater part of the country, and thus realized Stanley's conception, it was necessary, in the first place, to conquer the new state, whose actual existence was theoretical in a high degree, although it had been officially recognized by the Conference of Berlin.

It is true that since 1878 the irregular troops of the Committee for the Study of the Upper Congo, founded by the King of the Belgians after his first interviews with the great English explorer, had worked prodigies. But a strenuously conducted survey rather than a methodical conquest was what was required. Who can describe the courage displayed in resisting the drawbacks of the climate and fighting the blacks, who were still in an absolutely savage state?

The forest lends itself to ambushade and treachery. Of what scenes of carnage have the trees, beneath which we are

now traveling in security, been the ever-silent witnesses!

At that time all the tribes were cannibal. Moreover, the natives were stirred up by the Arabs from Zanzibar, who from the sixteenth century had used the river waterways to establish their domination over the whole of the system of intercommunication, and even over the inhabitants of the forest.

Opposed to European penetration, their power extended from the Zambezi to the Nile, and in the west along the Congo to the spot where the Oubanghi River joins it. One of them, the mulatto Tippo-Tip, was a powerful sovereign. This adventurer, who was immensely rich and possessed considerable influence over the blacks, was a strange figure. In his obscure and inaccessible soul he united generosity with astuteness, hypocrisy with frankness. Stanley, as well as Cameron and Trivier, had to take him into account and to ask for his aid, which he granted. Thanks to this they were able to succeed in their rash enterprises.

However, the advance of the Belgians gave offense to him. In 1889, Rachid, his nephew, opposed by armed force what he called their encroachments. The conquest of the Congo then entered on a new phase. The army of this new state was constituted; it was made up of native troops with a strong stiffening of Belgian officers. Leopold II allied himself with Cardinal Lavigerie, the apostle to the slaves, and organized a veritable crusade against Islam.

In 1891, Dhanis, Chaltin and Jacques, heroic Belgian soldiers, were also fighting for Christianity. Determined battles took place against Saïd-Ben-Abedi, Sefu and Rumliza, the Arab Sultan of Ujiji. Their troops were few in number, but in spite of this they resolutely pushed their way toward the north, took in hand the conquest of the Bahr-el-Ghazal, and in 1896 reached the White Nile.

On February 17, 1897, Chaltin crushed the Dervishes at Redjaf and pursued his victorious advance as far as

Lado; but there he encountered the diplomatic barriers which Marchand had met with at Fashoda. He had to retire, and, as a compensation, the Congo was given an outlet on Lake Albert.

The work of conquest was now over; the work of organization was to begin. The territory to be exploited was vast—about eighty times the size of Belgium. The Belgians held the rivers; but how were they to penetrate the virgin forest between them?

To open up roads of communication in these somber labyrinths, where man could not exist, seemed to be a mad enterprise. Considerable expenditure would be required, and this new state inspired only a limited confidence among European financiers, even in Belgium.

Besides, ways of communication are also those of exchange; for the barter of produce it was logical that production must first be organized, and that is how the system of "sporadism" began. Towns sprang up along the rivers to receive the supplies necessary for their development. The principle, as conceived, was that men would come to these so boldly planted towns; that is to say, requirements would arise, equipped with the organization necessary to satisfy them; then sporadic activity would follow of itself. The town would push back the forest, would open out clearings permitting the planting of crops; the planting of crops would settle the natives in one place; and soon this center of life, a real sporadic cell of germination, would project through the forest toward the other cells, from which it had been isolated at the beginning, forest tracks, roads and railways. These would cut up the forest, encircle it, render it healthy and drive out the wild animals; they would bring light into the deadly shade, rescuing men from sickness and terror; to subject it, they would split up the huge mass which, had it remained as an unimpaired whole, would have been invincible.

In writing his "Les Villes tentaculaires" Verhaeren celebrated the stream of life which the industrial towns spread like warm blood through Wallonia and Flanders. If the great Belgian poet had seen the Congo he would doubtless have been likewise inspired by its sporadic towns.

Today is the era of communication. Centers of production such as Elisabethville and the Katanga, the gold mines of Kilo-Moto, Niangara, Kinchassa, Stanleyville, and Leopoldville are exerting a constant thrust in every direction.

The equatorial forest is everywhere splitting up; they are building a great railway across it; an admirable road links the Nile to the Congo, and a regular service of motor transport provides for the needs of the constant traffic; the zone from the frontier at M'Bomou to Stanleyville, which we are now traversing, is one of the last corners of the virgin forest.

Good sense, audacity and tenaciousness form the basis of Belgian enterprise; these are essential qualities, the possession of which made Leopold II a great king, and day after day is continuing to make our friends a great people; for a people, like a man, is great by what it accomplishes.

When one goes through the equatorial forest and feels its grip; when one is in a position to envisage its huge mass and to see it being attacked, split up and overcome, he is right in describing the creation of Belgian Congo as a mighty work, and in having faith in its lofty destiny.

Bondo and the surrounding district are our first sight of one of these sporadic clearings. While going down to Stanleyville there are others which will surprise us less, but will perhaps excite our greater admiration—Buta, Banalia and Bengamissa.

The white population of Buta includes not only officials and soldiers, but also merchants, artisans, and even industrial workers.

The administrator of the district is a born trainer of men,

and the mayor has given the town a charming appearance. Each person has a brick-built cottage standing in a garden full of flowers, often surrounded by a hedge of hibiscuses and crotons. There are lawn-tennis, a club, musical societies and amateur theatricals. The mayoress goes in for stock-raising; the exotic surroundings and the charm of the Belgian home make a very harmonious blend. Usefulness is combined with what is pleasing; there is a hospital, a complete medical service, shops and a garage; there is also the mission of the Premonstratensian Fathers.

In a general way, the missions play the same very important rôle, in the colonization of Africa, as that performed by the monasteries when Gaul was in process of being colonized. They all have courage, and all are deserving of admiration. We do not think we can make the usefulness of their work better understood than by quoting the example of the mission of Buta.

Premonstratensians and Marist Brothers live there in peace hallowed by labor. The number of acres they cultivate has no restriction, and their buildings rise up as and when required, for labor is abundant, and the mounds of fine clay heaped up everywhere by the ants form inexhaustible quarries for producing bricks and tiles. The brothers are designers, carpenters, locksmiths and wheelwrights. They have workshops, and instruct artizans like the guilds of former days, and one of the fathers in the school near by teaches those who show the most aptitude.

The rule of the missions is the rule of hard work as explicated in the vigorous words of the Bishop of Bangui:

"We shall make men of them, and they will become Christians."

The missionaries at Buta are splendid teachers; their instruction is given in the language called Bengala, which is used throughout all the north and west of Belgian Congo; the south and east employ the Kiswahili tongue. These

languages, which are based on the countless different native dialects, form a kind of Esperanto; but here Esperanto has come at the right time, that is, before the different races have formed into nations and evolved each its own culture and language.

And so dialects are gradually being effaced and Bengala is becoming the dominant language and one of the most valuable factors in the unification of Belgian Congo. The missionaries have written and printed books in Bengala; later on the pupils whose minds have been sufficiently developed will learn French—but only later on. This is a wise precaution and will doubtless prevent unfortunate degenerates from speaking a language their minds are unable to follow.

The chapel, living house, store-house and kitchen of the mission were built in 1911. A small farm for breeding goats and sheep was started in 1913. It is now a model farm, in no way inferior to those in Hainaut. In the stables are horses and colts, their coats glossy with health, side by side with elephants, captured when quite young and perfectly domesticated. In the meadows we see milch cows! Bergonier will not believe his eyes and loses all his illusions of the invincible power of the tsetse-fly.

"We manage to overcome all difficulties," the farm brother tells us. "We have had animals for breeding purposes brought here in cages made of sheet iron in order to preserve them from any stings from the very beginning. Then," he modestly adds, "the science of vaccination has made such vast strides since the days of your great Pasteur."

The church, begun in 1918 from plans drawn up by the father architect, was finished in a year and a half, under the superintendence of the brother master-builder. It has a nave 180 feet in length and 52 in breadth; the height of the belfry is 98 feet. The pulpit, altar, and the Stations of the Cross in ebony and ivory, are the work of the brother cabinet-maker.

The dispensary does honor to the brother infirmarian. Brull learns that a brother engineer has harnessed a waterfall not far off for the purpose of making a sawmill and hydroelectric station. Specht has long talks to the brother photographer; and while we are admiring the refectory, Bergonier joins us and says excitedly:

"There is also a brother naturalist!"

And so the missionaries, whatever order they belong to and in whatever part we meet them, labor in certainty and joy, asking for nothing but what comes from their own toil. Ozanam wrote a very fine book on the monks of the West through whose instrumentality medieval Europe was evolved; a similar book might be written on the missionaries who at this present hour are one of the civilizing forces of the Dark Continent. It would be doing them an injustice not to recognize this force at work.

We pass only one night at Banalia after crossing the Arwimi. We see merchandise lying on the quay; and the numerous huts of the Mangelima, so picturesque with their pointed roofs, are evidence that it is a prosperous place, for natives settle where they are well off—*Ubi bene*.

There is the same animation and activity at Bengamissa. The administrator is a man of action who does not seem likely to be often at a loss. We ask him if there is such a thing as a forge where we can get repaired the axle of a tractor which was damaged when executing a difficult movement.

"Wait, I will summon my blacksmiths," he says, and then addresses a few words in Bengala to a bronzed athlete. A few moments afterwards the sound of a kind of gong, struck very slowly, rings out on two notes with the precision of the Morse telegraph. The administrator answers our mute inquiry:

"That is the *goudougoudou* transmitting my order a distance of four kilometers to where my blacksmiths live."

The bronzed athlete, striding out from a striking panorama in which is seen the Lindi River winding amid the immense stretch of forest, continues for a few more moments sounding the wooden cylinder, which is resting on a mahogany stand in a bed planted with bananas.

The goudougoudou is a tree trunk hollowed by fire. A longitudinal split made in the resounding inner surface enables two notes to be given out, as it is not of uniform thickness. On the end of the drumsticks a piece of raw rubber is fixed. The goudougoudou serves a purpose similar to that of the kettledrums in an orchestra.

It is the special means used by the Azandé tribes for communicating with each other in the forest. But in this case we must not speak of the Morse telegraph, for the messages sent by the goudougoudou are not composed of words; they are musical, or, more accurately, rhythmic airs which should rather be compared to those bells which rang the tocsin, or the passing bell, from neighbor to neighbor in the forests of Gaul.

Thanks to the goudougoudou the tribes could mobilize in one night in the early days of their conquest, and it was impossible to take them by surprise. Detachments of troops who rashly entered the perpetual obscurity of the forest heard, passing over their heads in the night, their sentence of death without understanding it, for the rhythms of the goudougoudou are secret. All the natives do not know them. There is a goudougoudouist in every village who knows by tradition the secret conventions; some of these are common to every part of the forest. European ears are unable to unravel the syntax of this esoteric language, the complications of which are very great, if one may judge from the multiplicity of details it can transmit over a distance of fifteen kilometers. In the silence and dampness of the night, or in the ozone which is freed after the passing of a tornado, the goudougoudou can even be heard at a distance of more than twenty kilometers.



An hour later the damaged axle is growing red in the native forge. Its earthenware mouth and the bellows of skin, identical with those found in Arab forges, clearly indicate who it was that introduced the art of working in iron into these regions.

The goudougoudou is a magical instrument, like those which the fairies in fairy-tales give to their protégés, and the administrator of Bengamissa, no more stirring from his post than an enchanter from his palace, has only to lift his hand to make all the men he has bewitched come running to him.

"Sorcerers! Do you want to see some sorcerers?" he says in the simplest manner. And before we have time to reply the goudougoudou is sounding the very devil of a rhythm.

A little later, while coffee is being served under the veranda, faint sounds of music in the air come to our ears. They seem like chromatic arpeggios produced on a bird-organ or harpsichord, reminiscent of the centuries that are past.

"I recognize Mélémokia's *likembi*," the administrator remarks.

At this point we notice three strange figures approaching through the palm trees. First comes the player of the *likembi*, which is an instrument in the shape of a flat box in which are laid fanwise thin strips of iron which give forth a sound when touched by his agile fingers. As he walks along, Mélémokia unceasingly beats out the arpeggio which puts evil spirits to flight. His head is adorned with a cap made of monkey-skin, on his neck hangs a string of amulets, and his loins are girt with the skin of a tigercat.

Behind him comes Kolongo more simply clothed in a loin-cloth made of bark and held by a fastening of liana, rigid as a steel cable, and the *makati*, which is a cord going tight round his abdomen. This is an infallible talisman to ward off hunger.

Lastly, a third personage, clothed in a tunic made of raffia palm, and wearing on his head a sort of red miter, comes forward with grave steps supporting himself on a tall *marquise* cane. This is Bulo the sorcerer, who by the grace of Likoundou (the Spirit of Evil) holds sway over the whole region.

When they hear the call of the goudougoudou the agents of these hidden forces meekly depart from the forest.

This man Bulo is a power, inheriting the secrets of their ancestral sorcery and dispensing *libengué* largely.

Libengué is a danger not unknown to us. We have already met with small heaps of liana rolled up in a bunch and carefully protected by a little roof; these are dangerous supplies, stored up by hunters for the purpose of poisoning their arrows and assagais; but the official use conceals a secret employment of poison which is still to this day the treacherous weapon of all the Borgias of the forest.

Libengué is the poison used by the sorcerers in the trial by ordeal. When misfortune comes, when rogue elephants take toll of a clearing of bananas, or demolish a few huts with a push of their shoulders, when leprosy ravages a family, and, speaking generally, every time a death occurs, those who are affected thereby go to the sorcerer and make him a suitable offering in order that he may consent to unearth the one responsible for their misfortune.

Everyone knows who he is; it is always Likoundou, the evil destiny, but he must be discovered in order to be rid of him.

If the offering has been of sufficient value, the sorcerer or sorceress one evening assembles the inhabitants of the clearing round a large fire. No one would dare to refuse this invitation, for he would immediately be named as being possessed by Likoundou.

After a few ritual dances, accompanied by a state of general drunkenness, the sorcerer takes a small instrument

consisting of a peg inserted in a piece of wood so that it can turn round easily. While the appellant is calling off the names of those present the sorcerer turns the peg round in the piece of wood; when the name of the guilty one is uttered, the peg will bite with a grinding sound.

But it does not always bite. This shows that everyone present has taken the wise precaution to go individually to the sorcerer, before the ceremony, and make him a polite offering. Consequently when this happens, everybody is innocent. The sorcerer then takes a chicken or a dog, and opening its stomach, he draws out the bile tract, the form taken by Likoundou when entering the bodies of the living.

But if the peg makes a grinding sound when the name of anyone present is called out, he is immediately apprehended. He may, however, justify himself by submitting to the ordeal by poison. If he resists the effects of the decoction of *libengué*, it is because he was able to come to terms with the sorcerer at the last moment. If he succumbs in the midst of appalling suffering, it is because he was invincibly simple.

As for the chicken, its bile duct, held up to the crowd, proves that the verdict has been just and that Likoundou has been satisfactorily laid by the heels at the spot where he was hiding. The body of the victim was formerly served up for a concluding feast.

The power of the sorcerers is almost dynastic, and we cannot say that these sly old rogues are not convinced; they are as credulous as their victims and believe in their own power; all the more reason, in their opinion, should they be paid highly.

The popular mind is the same everywhere; to make an impression on their clientele the sorcerers of the equatorial forest only employ the same means as other charlatans, such as extraordinary costumes, dances and ventriloquy. In Tippo-Tip's former village, quite close to Stanleyville,

we see some model representatives a few days later, two Baleka sorcerers; they are Meli-Massikini, whose name signifies "Meli-the-poor" and Paalipopotee, that is, "the all-present." Crowned with plumes, their faces painted white, and surrounded by sorceresses chanting the "Tambue," these two fellow sorcerers, in company with their wives, dance for our benefit a veritable ballet reminiscent of the "*danse du ventre*" of the Ouled-Nail.

But the tyranny of the sorcerers of the Evil Destiny is not complete. There exists a corporation of good doctors, the *mufumu*, who, with their knowledge of antidotes and beneficent herbs, practice incantations to paralyze the powers of evil. With their bodies streaked with white lines coarsely representing the skeleton, they dance with the frenzy of the whirling dervishes in order to attain that state of clairvoyant hypnosis in which they can prophesy. We witness one of these gruesome dances in Bengamissa.

It is conceivable that the influence of the Arabs has corrupted in these regions the primeval fetishism, of which a powerful race like the Sara, with their *Hyondo*, has preserved the most expressive traditions in their highest state. Here, these beliefs, springing from the forest, are crumbling away with it.

Besides, the natives are Bantu, who are more conciliatory and malleable than the races crossed with an Ethiopian strain; nevertheless, in all this make-believe, we still find cropping up the doctrine of the ancestral Beast.

Jean Michaud, in the course of his expedition from the east coast of Africa to this spot for the purpose of bringing supplies, saw in the eastern portion of the forest a ceremony of initiation and circumcision, at the conclusion of which the initiates returned to their village from the forest by passing through a long tube of straw; have we not here an allegorical representation of the idea of a spiritual rebirth?

When we are rolling the whole day long in the damp semidarkness, through the scattered clearings of Belgian colonization, the silence under the leafy vault promotes meditation on the mystery of the primitive life of man.

How suggestive are those naked families carrying all their possessions on their heads as they silently walk along, while the father is sounding his *likembi* to scare off harmful spirits! From time to time he chops a passage through; a woman, bent double, carries on her back fifty kilos of manioc, held in position by a liana passing round her forehead, very like the yoke of beasts of burden; a young mother, still a mere child, shelters with a banana leaf her new-born babe, a little woodland animal, whose eyes blink at the slightest ray of the sun. Signs which are unknown to us, such as bent branches and crossed sticks, show them their way.

We come to a few huts. Before each door is hanging a buffalo horn indicating that the hut is empty, but preserving it from thieves, for Likoundou enters the bodies of those who dare to brave this talisman. Only an old man, glued to the ground by elephantiasis, is mending some nets for hunting little antelopes. His face sweats out melancholy.

Often a man, such as the Chief Libakua, whose portrait Iacovleff is doing not far from the river Télé, is seen smoking his pipe made up of a screwed-up leaf stuck in a bamboo; this is the *kiko* in which he inhales the smoke of hemp, a hashish in which he drowns his poor conscience.

A little later on the expedition is to become acquainted with the primitive state of human life in another district of the forest, where we meet a race of beings who have no means of seeing the sky other than climbing to the top of the trees beneath the shade of which they stifle; these are the pigmies.

THE PIGMIES.¹

When we reach the station of Arebi, the administrator presents to us some tiny human beings from four to four and a half feet in height. Although a little degenerate-looking they do not show any deformity, and no one can say that they are dwarfs.

These are types of the pigmies, which certain travelers have called Wanda. In this region, inhabited by the Mamvu, they have received the name Mamvuti, which might well be a kind of diminutive, all the more so because the natives call them familiarly by the name of Tick-Tick, an onomatopœia reminiscent of the gnomes with which children's stories in northern countries still people the forests.

Five hundred years before the Christian Era, Herodotus made mention of the existence on the shores of Africa of little beings of human aspect taking refuge in the trees. He called them "gorii," which was translated "gorillas," thus for a long time placing their human attributes in doubt. It was not until the middle of the nineteenth century that science finally accepted their existence, when Livingstone and Stanley made their discoveries.

Their presence on the coasts mentioned by Herodotus is fair presumption that in former days, before the Ethiopian or Bantu migrations, they occupied the whole of Equatorial Africa. The natives of these races regard the pigmies with superstitious fear. They consider them to be, as it were, the owners of the soil, and fear their little poisoned arrows falling unexpectedly from the height of the trees above. We should therefore find ourselves confronted by an autochthonous race, possibly primeval, tracing back to the first ages of the world.

What has caused the pigmies to take final refuge in the center of Africa and to remain there, untouched by the

¹ Ethnographical notes by Léon Poirier and Alexandre Iacovleff.



Alexandre Lacroileff drawing a portrait of Libakua near the river Télé

evolution which has transformed humanity everywhere else? No one can answer this question.

The proportions of the bodies of the pigmies are infantine (five or six heads in length); the shortness of the legs contributes to this result, as the trunk follows the dimensions of that of a man of small stature. The arms, on the contrary, are disproportionately long, coming down as a rule below the knees, in such a way that the structure as a whole appreciably recalls that of the chimpanzee. This, however, is rather to be expected, for the Tick-Tick climb trees after the manner of monkeys, literally running along the trunk which they grip with their hands like forefeet.

The head is capacious; the forehead curved and well developed. The type, moreover, of those who have remained untouched by any crossing of strains (there were few of these at the station at Arebi) has something Semitic about it rather than specifically Negroid. Their color is relatively clear, a coppery red. The distribution of the hair is very strongly developed; the face of the adult is ornamented with a well-grown beard and that of the youth with budding whiskers; the breast is sometimes covered with a woolly fleece.

The glance of a pigmy is often keen and cunning; we do not find in it the low and almost animal expression to be found in certain negroes. The pigmies have a character of their own—a bad character, according to the Mamvu who acts as our interpreter. This man is so little acquainted with the monosyllabic and guttural language of the Tick-Tick, that we prefer to communicate by the more direct method of pantomime, punctuated by the offer of tablets of salt, which brings smiles of covetousness to their lips.

The pigmy does not seem to be without sensibility. He takes alarm at any little quick gesture, flies into a temper, and understands fairly quickly what is required of him; his human faculties appear to be complete.

As they did at the time of Stanley's journey, the pigmies still live in families scattered through the forest, out of which they never emerge. The bait of salt, and a supply of bananas, enable the administrator of Arebi to keep them with some difficulty at the station for twenty-four hours. Every moment they show their desire to disappear, and in order to complete our study we have to follow them into the forest.

The Mamvuti know nothing of the embryonic society constituting a tribe. Consanguineous alliances seem to be frequent, and we have not been able to discover any indications of their beliefs. They have very few amulets. Only the women wear necklaces of twisted creepers. There is no professional sorcerer among them. According to native testimony they are not cannibals, but, on the other hand, might very well have been easy game for man-eating tribes. This may explain the small amount of fellow feeling existing between them and the natives in the clearings. Necessity compels them to barter with the latter, in order to obtain salt, iron-pointed arrows and bananas; but this is effected in a mysterious manner. The native lays these objects, or produce, on a stone at the entry of the forest and goes away; a few hours later he finds in the same place the game brought there by the Tick-Tick, usually small antelopes or monkeys.

The Tick-Tick know nothing of the elementary principles of agriculture, and are even ignorant of how to demolish trees in order to make a clearing where bananas, of which they are very fond, might grow. This would seem to indicate that the pigmies have had no knowledge of the use of fire for a very long time back; if it were not for this they would have been able, like the other natives, to set light to the base of certain trees which can be burned when green, and thus clear them up by burning during the dry season.

They would likewise understand working in iron, of which they must be ignorant since they are incapable of making the points of their own arrows. It is true that the head of the district of Irumu told us that he had himself seen Mamvuti producing iron in a sort of kiln, but our observations lead us to suppose that this is an instance of relatively recent progress.

The explorers who saw the pigmies for the first time agree in saying that they live on larvæ and eat the raw flesh of small animals.

It is probable that at that time the pigmies were still using stone instruments; a few specimens have been found in the forest at the foot of trees where they had been hidden. These take the form of polished stones, generally of metallic formation which does not exist in strata in the forest, but might have come from the primeval soil of the higher regions bordering the great lakes. The tribes in the clearings attribute a superhuman origin to these axes and iron points; they think they were thrown from heaven by Bag-bé, the animal who produces thunder. It seems that the lightning, when striking a tree, uproots these stones, the metal in which forms a good conductor.

The pigmies, in spite of the poverty of their weapons, or perhaps on account of it, are wonderful hunters, for they are obliged to use patience and cunning in as great a degree as that possessed by wild animals. They are inseparable from their little bows strung with a cord of twisted creeper scarcely twenty inches long. When they cannot obtain iron-pointed arrows they make use of wooden arrows hardened in the fire.

They do not willingly attack large animals, but when they meet an elephant these little beings, smeared with dung in order to put the animal off the scent, silently glide over the trees by night, and succeed in approaching near enough to cut off the trunk of the pachyderm. They then follow for

several days its bleeding track in the certainty that it will not recover from this mortal wound.

They likewise make use of snares arranged above the ground, composed merely of a hunting-spear hooked up in the trees at a height of fifty feet above the path which the animal they wish to attack traces in the forest. A network of twisted creeper is skilfully bound to the point where the spear is attached, and the animal itself releases it when passing underneath.

Nevertheless, birds, monkeys and the small gray antelope are the usual game pursued by the Tick-Tick. Hidden in the branches they imitate the cries of these animals, which run up and receive pointblank a small poisoned arrow.

On the following morning we go into the forest to see a family of pigmies in their own home, to secure some films and to take some photographs to complete the record obtained from the sketches made by Iacovleff.

On the banks of a river a gnome is descending the long trailing creepers with surprising rapidity. For a moment he remains suspended by one arm above the green water, and the monkeylike character of his position is striking. Some bananas, salt, and a few smiles quickly tame him.

We accompany him to the huts of his family, which are difficult to discover because of their similarity to the foliage. These huts are made out of the leaves of the *ligoungou*, with which all the dwellings to be found in the forest are covered, a kind of vegetable tile, which will not rot, does not easily catch fire, and is very strong on account of its thickness. As the pigmies continually change their abode in accordance with the necessities of the chase, their huts are always green, and blend with the foliage of the dark undergrowth.

The perpetual shade in which the pigmies live must have something to do with their small stature: grass is always short at the foot of the giants of the forest.



We offer to the head of the family a quantity of bananas. He receives them gladly, but the curiosity he excites in us disturbs him. He is very small. His eyes are sunk deep beneath his bushy eyebrows; his mouth, which is covered with a frizzy gray beard, is only slightly thick-lipped; the hair on his head is also gray and only slightly woolly. One could really say that the distribution of his hair spares only the palms of his hands and the soles of his feet; his breast is completely covered over with entirely gray hair. He is called Oudorodiavo, and he presents to us his sons Oto, Amando and Abuluru.

Many names of women begin with the prefix Ma: Mabinz, Makongo. Can we make a linguistic affinity with the word "mama," which seems to be the first stuttering utterance of every human being, all over the world? In any case we see before us some tiny mamas, no larger than little girls of eight years, carrying on their hips their new-born, who greedily take nourishment from the little double-lobed nipples; it is a touching spectacle of an almost animal maternity. The women are very timid; Oudorodiavo speaks to them harshly, but without brutality. They seem to respect him without, however, showing the attitude of slaves.

The appearance of the cinema provokes some slight apprehension, and when we ask those present to be good enough to hide themselves they hasten to comply; it is not a scurrying off, but rather a flight, for all the pigmies, men, women and children, disappear instantaneously into the trees. Where a moment before a hundred individuals were assembled, there now remains not a trace of one. It is truly impossible in the forest to find a pigmy who does not wish to be taken by surprise.

At the command of Oudorodiavo the fugitives return in little bunches, climbing down the trees by sliding along the hanging creepers. The bananas are distributed, and one

of us, with a view to gaining his confidence, sits down near the river with the first pigmy he meets in order to partake of the meal with him.

The native host gives signs of a highly developed intelligence. His unexpected guest endeavors to insinuate himself into the little dwelling, but is content to crouch down at the entrance for fear of demolishing it, so tiny is it and of such frail appearance. The framework is formed simply of stakes stuck in the ground in a circle, and joined at the top so as to form a dome.

After the repast, with a view to testing the skill of the pigmies in shooting we attach what remains of the bananas to a branch, and offer it as a target to the bowmen standing at a distance of sixty-five feet. What is our astonishment when we see that only one out of twenty-two hits the mark!

The pigmies, who are very discomfited, make us understand that the distance is too great. This is proof positive that their manner of hunting permits of their shooting only at very short range.

However, we distribute lumps of salt all round, but give two to the successful competitor, who shows clearly his sense of our equity.

Rejoicing in this little world is expressed in very primitive dances: They circle round a rudimentary tom-tom with little jerky steps. Oudorodiavo watches the movement of his subjects with an attentive and severe eye. The roundelay consists of several circles, and the men and women are not mixed. Oudorodiavo, with one hand resting on his hip, and the other on a staff—the emblem of his authority—gradually becomes more animated. He marks the time by nodding his head, like an old man listening to some air he knew in his youth; his hands move away from his body in unison with the movement of his head; his feet begin to beat on the ground; and, as though urged on by some compelling force, he starts off on his own account.

The dancing men and women are soon in a sweat, the tom-tom ceases, and everybody makes a rush to the little river, which at this spot is very much enclosed, and as if buried beneath a tunnel of green foliage.

It is bathing time. With studious care the men take off the piece of bark which serves them as a loin-cloth; the women, however, do not follow them, but hide themselves modestly in order to shed their tiny apron of leaves. When they are in the water, doubtless thinking themselves to be less naked, they allow Poirier to come near and record their gambols with the cinematograph. They enjoy themselves like children. Oudorodiavo considers their play has lasted too long, and intervenes authoritatively. Immediately the noise ceases, the Lilliputian naiads get out onto the bank again and resume their Eve's costume. The time of recreation is over.

O humanity of yesterday and of today, there are perhaps ten thousand years between you, and yet you are still as like as twin sisters!

STANLEYVILLE.

Having seen, since leaving M'Bomou, the virgin forest permeated with the irresistible current of progress, we are greatly impressed when we reach Stanleyville, the center of the sporadic energy the effects of which we have been witnessing on all sides.

Stanleyville is Boula-Matari's capital in a twofold sense: first, because he himself lived there on the borders of the Congo, and there established his headquarters during his negotiations with Tippo-Tip; second, because the strength of human expansion, the germ of which Stanley came to lay, in this spot caused "the rocks to explode," just as the faith of the builders of cathedrals can "move mountains." In other words, this expansion has realized a wonderful work.

A simple outpost, three huts of dried brick, built thirty years ago by Lieutenant Dubois in a narrow space hardly won from the forest—these were the modest beginnings of Stanleyville. We can hardly believe this today as we make the round of this elegant and huge garden-city, which in certain of its aspects is reminiscent of the large centers in South America. Broad avenues bordered by palms, low-built houses with verandas, standing in the midst of flower gardens, a cathedral, a governor's residency, schools, banks, large shops—all the machinery of modern society is in its place and in full swing.

For the first time we see a hotel, the *Hôtel des Chutes*, so named from the falls of the Tschopo near Stanleyville. There is dancing at the *Hôtel des Chutes*: civilization does not transfer itself without bringing its accessories.

But if Stanleyville is an eloquent example of what human society can accomplish, if Malfeyt, Tombeur, Bertrand and General Meulemeester, the governors who have presided over the destinies of the eastern province of Belgian Congo, have been the artizans of its rapid growth, we must not forget that Nature also has provided the aid of a foster-father in the river Congo.

By means of this river everyone and everything has come and still comes here. Thanks to it Stanleyville is almost a seaport; its immense stretch of water unites it permanently with Kinchassa and Matadi where the boats call. A first-class system of water transport assures its communications. The Kigoma has just come in, and the appearance of this river steamer with its two funnels, the tall outline of which resembles those of the boats on the Mississippi, brings back to our minds, not without a touch of melancholy, the memory of the old Léon-Blot and the lighters on the Niger, held in affectionate remembrance on many accounts. But is there not a time when old boats, like old people, should cease work?

The Kigoma can carry three hundred people. She is driven on wood fuel; her comfortable cabins open into spacious passages; the dining-room is elegant, and the tables are garnished with flowers and electric lamps. There are even a piano and a bar. Is not the art of attracting civilized men to the colonies that of putting the refinements of life within their reach?

A few days later the Kigoma's siren announces her departure for Kinchassa, and in the midst of a cloud of steam, which helps to deck her in the supernatural in the eyes of the natives, she pushes out into the middle of the stream, urged on by her single stern paddlewheel.

At this moment a canoe is coming down-stream; it is similar to those seen by Stanley when he reached these river-banks, which have now become quays; perhaps it may even be one of the canoes he saw. The two boats cross each other, one a hollowed-out tree of early ages, the other a metal hull of modern times—a symbolical meeting, the eloquence of which is still further accentuated by the action of the head paddler in saluting the big boat as though to give her pride of place.

And so, in the transitory period which this country in its transformation is passing through, the picturesque is often made up of contrasts. A casual walk through Stanleyville is full of the unexpected. Here are negresses with tattooed faces, draped in many-colored loin-cloths, chattering as they return from the market; farther on, two other ladies, more scantily clothed, are carrying bananas on their hips, according to the custom of the forest. They are accompanied by a young man in bathing drawers holding a cigarette in his mouth and swinging his arms.

In another place we see the mounting of the guard, the music being rendered by the "City Band"; with martial step and trumpets blowing it marches through the streets. On either side a procession of little negro boys marches in step;

the prestige of the municipal guard holds its own even in this place.

In front of the cafés, where the public officials are taking their apéritif, three negroes, wearing collars and suits which were once white, are discussing questions of interior politics. They watch with a superior air three robust Azandé, armed with their assagais, passing by.

Under the palm trees on the quay a White Father is reading his breviary, while near him two negresses coming out of the water after a bath, are lending themselves with good grace to the camera of a commercial photographer wearing gold-rimmed spectacles.

A mingled crowd of types like these have come to an exhibition of Iacovleff's pictures, which he is holding at the request of the European colony. We too see again with pleasure the incidents which have been portrayed by our friend's talent; but the happiest among the spectators, I say without fear of contradiction, is Louhao, the chief of the Wagenia tribe.

He has come to visit the exhibition perched upon his bicycle, and is wearing the very costume in which Iacovleff drew him the day before.

Louhao is of the old nobility, and has the right to wear a necklet of panther's teeth and a topknot of parrot's feathers. He is fierce-looking and is a great talker—qualities required of a great chief in the country of the Wagenia, if not elsewhere!

The Wagenia are a riverside tribe on the Congo, and near the Stanley Falls, four kilometers above Stanleyville, have established fisheries, which have remained just as Stanley saw them for the first time in 1875. Louhao exercises very vigorous authority over his tribe; he is a personage, having the right to be received in state at the governor's office. He happens to be there when we are receiving a message by telephone; an amiable official lets

us know that he will go with us tomorrow to Stanley Falls, where Louhao is to preside at a native court of justice of which Poirier is desirous of making a record. At his request we pass the receiver to Louhao. He places it to his ear with a laugh, but when the conversation continues in native dialect he lets the receiver drop to the table and moves away uneasily. When we ask him the cause of his agitation, he declares, "It is all right your machine talking French, but how comes it speaks the language of my father?"

It is quite clear that a logical mind like his must have predestined him to the exercise of magisterial authority, and we are not surprised next day to find him a remarkable figure when functioning as a justice of the peace.

The court is held in the open village square. Louhao is surrounded by notables. His costume is the same, but his necklet of panther's teeth is reinforced by a beadle's chain on which is hanging a round medal to mark his dignity as chief, as recognized by Boula-Matari. He is more proud of this than of his ancestral necklet.

The puerile vanity of the natives is a powerful lever of which the Belgian administration knows how to make good use; but it sometimes has unexpected surprises in store. A very amusing story was told us in this connection.

At that time they were instituting a campaign against the polygamy of the blacks. A tax was decreed with the principal object of making the chiefs reduce the number of their wives: five francs per annum per wife. But it was necessary to give a receipt when the tax was paid; as it was impossible to use paper for this purpose, on account of the ants, counters were struck. Now, after a few months of this new régime, the official reports indicated a rapid extension of the polygamy they were trying to reduce. The natives were so proud of possessing these counters that they wore them in the form of necklets, and so it happened that

evening. The red line marking what we have already accomplished now seems like a route through a country of memories: Colomb-Béchar, the mirage of Tanezrouft, the waters of the Niger, Barmou's harem and its visions of the East, Tchad, the savanna, the fetishists, Bangui, the forest. . . . At Stanleyville the red line seems to stop at an obstacle; the forest wears the appearance of an impenetrable network down by the region of the great lakes, separating us from the Indian Ocean as though by a high wall; and the retreat is commencing.

The retreat had been foreseen, of course. The countries across which our route will lie—Egyptian Soudan, the valley of the upper Nile and the Abyssinian plateau—possess the highest interest; we shall certainly be able to reap a rich harvest of scientific, artistic and economic documentation, and this well-studied itinerary is in perfect accordance with the ends for which the expedition has been specially undertaken.

Yet, before stretching ourselves under our mosquito-nets, we exchange interrogative glances with each other.

The whole camp is asleep.

The blacks, who have cropped up from out of the undergrowth, as is their custom, are keeping watch with our boys around the fire which they have lighted. They nibble the *bakua* (winged ants) which come and burn themselves at the fire. One of them lulls his sleepiness on the thin strings of the *likembi*, to which from far off the deep bass of the goudougoudou, the nocturnal voice of the forest, replies.

Are not the clearings in the forest telling each other that the envoys of Boula-Matari have not been able to go any farther and are returning home?

I cannot sleep. The tracing of our itinerary is strangely mingled in my mind with a scene already distant, but nevertheless singularly vivid. It was at Rambouillet, a few weeks before our departure; we were unfolding our project,

with Monsieur André Citroën, to the President of the Republic, and the Head of the State said to us:

"Think of Madagascar; it is a far-away and isolated piece of France."

As the crow flies Madagascar is now quite close in comparison with the distance we have already traveled—the long stretch of the high lake regions, the depression down to Mozambique, and then the coast of the Red Isle rises up from the Indian Ocean.

Are we to go away without having approached it?

We have just traversed the immense domain on which France and Belgium, united by the same culture and by the same language, have marked their imprint; but we have not yet reached the limit of expansion accomplished by the Latin races. A little farther, and there is still Madagascar, and to stop here would be to leave our adventurous cruise incomplete.

There are numerous obstacles: the mountains of British East Africa, deep gullies seaming the slopes from the lakes as far as the coast, the unexplored region of Nyasaland. The information we possess relating to this zone shows it to be almost impossible to traverse.

It is because this hinterland is so unpropitious for linking up that certain ports on the eastern coast are so little developed in comparison with those on the west.

What great economic value a reconnaissance of Dar-es-Salaam, Mozambique and Beira would possess! These ports should be the natural outlets for Madagascar, whereas at the present moment they have no relations with her at all.

But let that pass. . . .

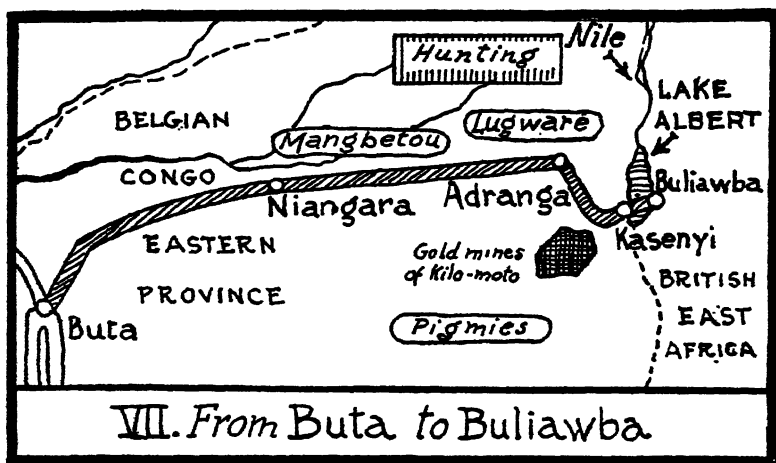
March 18, 1925.—It is not at Jibuti but in Madagascar that we are again to find ourselves on French territory.

Instead of going back by Fort Archambault we shall push on straight toward the east, after leaving Buta, and reach

Lake Albert without difficulty by the Congo-Nile route; and from there Kampala, the capital of Uganda (British East Africa).

At Kampala the expedition will be divided into four parties, each respectively having as its objective: Mombasa, Dar-es-Salaam, Mozambique and the Cape of Good Hope; each party will be in two cars; this formation will be more mobile, the chances of success will be multiplied by four, and we shall meet again at Tananarivo.

On leaving the clearing of amaryllises we shall still be going north, but nevertheless we seem again to have resumed our forward march. . . .



OUR caterpillars left Buta on March 22 by the Congo-Nile route which crosses the entire northern portion of the eastern province of Belgian Congo.

They passed Niangara and then Adranga, from which place a good track enabled them to cross the mountains and come to the gold mines of Kilo and reach Lake Albert at Kasenyi (April 12).

Before arriving at Faradje the expedition ventured on further hunting tours (buffalo, rhinoceros and elephant), and spent several days in obtaining ethnographic information (Mangbetou, pigmies, Logo and Lugwaré).

It crossed Lake Albert on the steamer Samuel Baker from Kasenyi to Butiawba on the Uganda shore of British East Africa.

Chapter VII—The Congo-Nile Route

March 23—April 13

ON THE ROUTE OF THE EGYPTIAN CARAVANS.

WHEN the Asiatic migrations conquered North Africa, the equatorial forest in which the black races took refuge became a slave preserve for the conquerors, and many trains of caravans betook themselves there to obtain their supplies.

Whereas the Arabs had to reach the forest zone by going up the great rivers, the Egyptians possessed a ready-made route, namely, the Nile, by which they could ascend as far as Redjaf, formerly Rayaf.

The watershed of the basin of the Nile and the Congo is only two hundred kilometers from Redjaf. To reach the network of rivers, the ramifications of which form the veins of the equatorial regions, this watershed can be easily surmounted by way of the Uélé. This formed the natural means of approach for the invasions of former days, and we, in our turn, shall follow the same course to a great extent in order to reach the slopes descending toward the Indian Ocean, beyond the great lakes which form the sources of the Nile.

This itinerary is all the more simple inasmuch as a wonderfully well-maintained route, the Congo-Nile, has been created to provide Belgian Congo with an outlet on the great Egyptian river.

From Buta we shall be able, without any difficulty, to continue our journey eastward by keeping on the outskirts of the forest. This will enable us to give more time to

gathering useful information, and we shall have the opportunity of separating into small parties, for the purpose of making short stays in places affording interest to the special missions with which they have been respectively entrusted.

Iacovleff, Poirier and Specht will collect ethnographic material while Commandant Bettembourg and Brull will be visiting the gold mines of Kilo-Moto. As for ourselves, we cannot forget the rendezvous we made with the elephants "in their own forest," as Saïd called it.

Now, Monsieur Devaux, the resident judge, an indefatigable hunter and an agreeable man of letters, has notified us of their presence in the upper Uelé district. As a special favor we are to be allowed to hunt in this region, which has been formed into a reserve. The government of Belgian Congo protects the elephants in a very efficient manner, for from its viewpoint their domestication is one of the essential preliminary conditions for breaking up and cultivating the equatorial regions.

A training farm for elephants has been created at Api, to the north of Buta, and we find there, in a high state of development, the results we saw obtained by the patient efforts of the Premonstratensian Mission.

The *m'bongo* must be captured when between eight and ten years old. Younger than that he cannot live without his mother; older, he will have passed the age when he can learn, and his strength will render his capture difficult.

Even at eight years it is not easy to capture an elephant. The method employed consists in passing a slip-knot round one of the feet of the young animal. It is not surprising that, in spite of the cunning and very great skill of the natives trained in this exceptional form of sport, this method of taking young elephants does not produce more than five in a year.

The "school" at Api was opened thirty years ago, and even now it contains only fifty boarders. Inasmuch as the

elephant is not fit for work before attaining the age of twenty, and does not breed in captivity, it is clear that more than a century is required to get together a herd of any size. It is true, however, that an elephant lives for two hundred years.

All this entails patience, to say the least, and it is quite natural that legend has made the king of pachyderms a monument of sagacity.

A philosophic serenity impregnates the atmosphere of Api. One cannot meet the manager, Monsieur Magnette, without at once calling him the "excellent Monsieur Magnette," and without remarking how his voluminous trousers and his placid walk lend to his figure a ponderous majesty.

Everything here, even the meals, is planned on an elephantine scale. In this place fried eggs are consumed by the half-dozen; we drink in goblets holding a liter, and the coffee-pot is monumental. Everything is colossal; the hours only seem shorter under this hospitable roof.

From the banks of the river, near which the camp of the young pupils is established, a rich voice begins to sing:

*"O lé yala yala
Soro Tibāi . . ."*

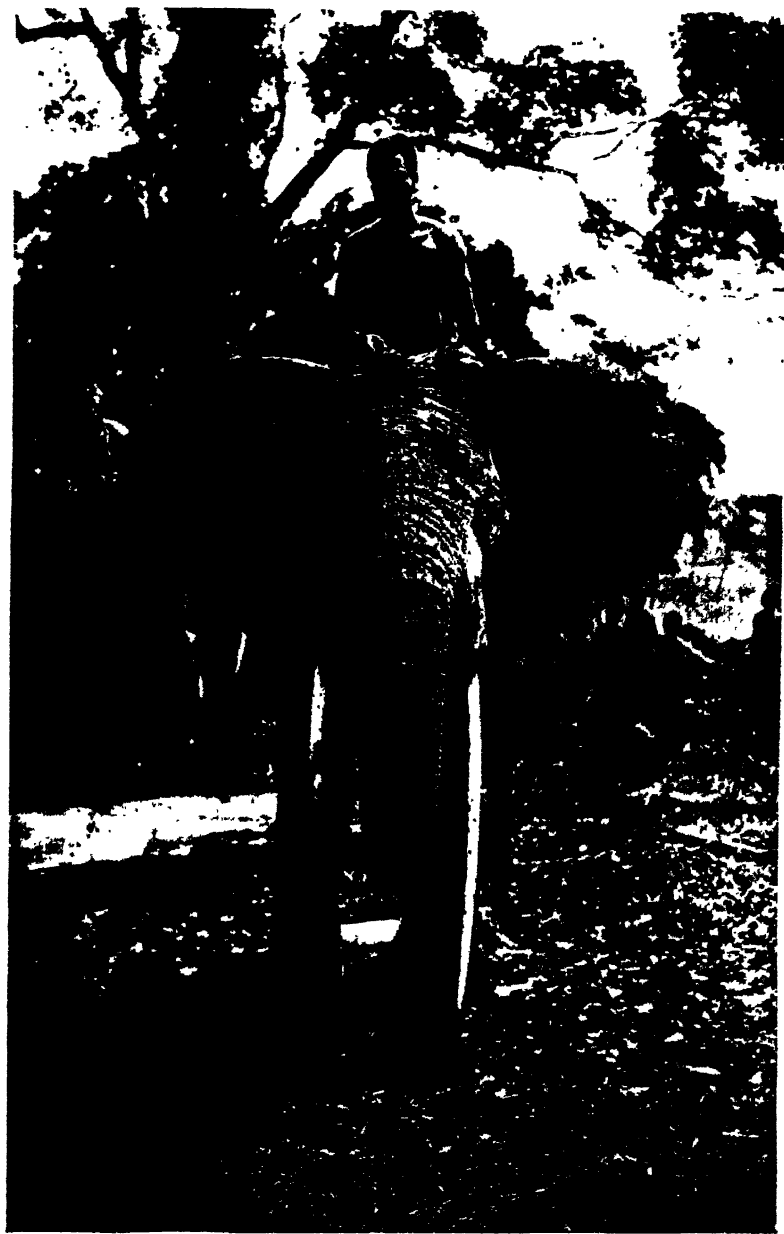
"Those are my *cornacs* [elephant trainers or drivers] singing," the excellent Monsieur Magnette tells us.

"Quiet, little brother,
All comes in time;
What's the use of crying,
When moon comes after sun."

"Is that your motto?" we ask the elephant's paternal guardian.

"No, it is their cradle-song."

He then takes us to the ground set apart for newcomers, where we see a curious spectacle.



An African elephant

Attached to four posts firmly fixed in the ground by long thick ropes, a young elephant, with outspread ears and trunk waving angrily, is furiously making for the circle of natives surrounding him. These are holding in their hands palm leaves which they wave in tune with their song. The palm leaves go up and down with a regular motion in front of the eyes of the exasperated animal, and are made to stroke his body on all sides to a slow rhythm.

"That is a fresh arrival," the excellent Monsieur Magnette explains. "He is a little put out, poor little thing, but the song you hear will have the soothing effect of a lullaby on him. The elephant is very sensitive to rhythm, and instinctively keeps in time with the beat. Soon his angry movements will pass from *furioso* to *allegro*, from *allegro* to *andantino*, and from *andantino* to *largo*. It is quite possible that the waving of the palm leaves will end by sending him to sleep, just as the cradle-song does the child."

The *cornacs* are Hindus, who have been at the farm since its creation, and who have brought with them this charming method. They possess in very truth the nursing instinct.

The young elephant has now let his ears fall down, and begins to nod his head with pleasure as the song continues:

*"Ayi tanda mouni
Soro Tibaï . . ."*

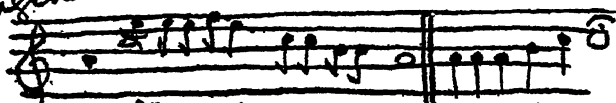
"Eat bananas, eat,
Eat the fresh young leaves.
While you're doing that
The moon succeeds the sun."

The "baby" is now motionless; its little eyes close; it goes to sleep under the soothing caresses of the palm leaves.

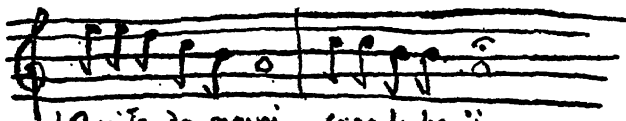


li'keubi (en bengala)
unique de tous
les noirs dans la forêt

Chanson ^{du petit} de l'éléphant
(Après) Tu mangeras des papayes
original ananas



o lé yala ya la so ro ti ba i la la ta i so zi
o lé ma a Ru ma na na



la yi ton da maini so ro ti ba i

la lune suit le même chemin
que le soleil

rythme . ' . . . ' . . . ' . . .

Sambessa

le retour du Ababua

discours du capitaine :

nous sommes ici pour le service de
Boulamatar.

Lo kouta (est-ce que je mens)

Lo kouta zé - Tu ne mens pas

Facsimile of a page taken from Léon Poirier's diary, in which he reproduces the lullaby of the little elephant. (For translation see pp. 196 and 197.)

Poirier is quite conquered by the scene and the music. He sets down in his inseparable note-book this simple ditty, remarking how very different it is from the songs of purely negro origin. The words, too, are really quite un-African; they are neither in Bengala, nor in Kiswahili, nor in the Azandé or Ababua dialects, but are in *Sabir*, a kind of mixed language made up of Arabic, French, Italian and Spanish, which the *cornacs* pronounce as if it were the words of some magic formula.

After spending two or three months with them, the young elephant becomes accustomed to men, and is then entrusted to the care of an adult elephant, who becomes his mentor.

Right at the beginning the pupil is attached by a rope to his teacher, but in a very short time this precaution is no longer required; a moral bond is established between them, and the pupil never tries to run away; it is then that his instruction in the first elements begins. The mentor instils into the young elephant the fundamentals of domestic life: not to demolish the huts by rubbing against them, to bathe in an orderly manner, to eat at regular hours and to recognize the voice of the *cornac*.

When he has learned this last lesson the period of secondary instruction commences. The *cornac* then becomes his professor and patiently teaches the novice everything that an elephant should know: to allow a man to mount on his back, to turn to the right when the *cornac's* foot presses on his right ear, to the left when the pressure is on the left ear; to understand the meaning of *tambouli* (forward) and *sâba* (that's right!); to hold out his trunk to take a pineapple or banana when his *cornac* scratches him on the top of his head . . . in short, many very useful little things which he studies until he is twenty years old.

Then the youngster has become a full-grown elephant; he eats his hundred kilos of leaves per day and can do the work of sixty men—felling trees, opening up tracks in the

forests, drawing carts loaded with a weight of six tons, and pulling six-bladed plows.

The worthy Monsieur Magnette points to the undulating plain with the following remark: "When I arrived here all that was forest. Today those are fertile fields—thanks to them," he modestly adds, pointing to his pupils with an emotion he cannot restrain.

Iacovleff shows him the drawings he has just done.

"But that's Faraki!" cries Monsieur Magnette. "And there are Libongo, Yenga and Betsy! How like they are! How well you have been able to render their expression!"

From the Api farm to Niangara, the splendid route offers to our view a country of European aspect. We go through fertile districts where the cultivation of cotton is in a specially flourishing condition. We make a short halt at Bambili to see the *makéré* dancers, who, wearing *tutus* made of banana leaves, present a veritable ballet.

Niangara, the capital of Upper Uelé, will remain in our minds as the country of the Mangbetou, just as the Hoggar recalls that of the Touareg.

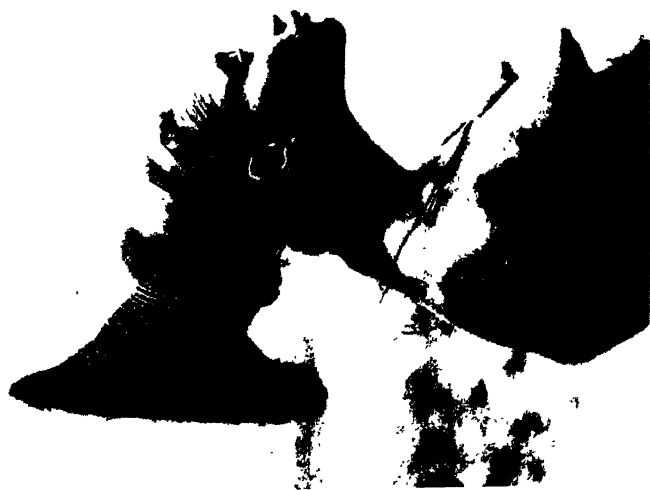
When we halt our caterpillars in a field and find ourselves in the midst of a gathering of chiefs, surrounded by their wives, the impression made on us is as profound as that aroused by our first encounter with the lords of the desert.

Seated in a stately pose on small ebony stools, the Mangbetou women form a row of figures like an Egyptian fresco. They suddenly call up in our minds a striking picture wherein the present age is linked to the civilization of the Pharaohs.

Their bronze bodies, of the color of coppery verdigris, and harmonious in form, are held motionless, the knees close together and the heads carried high. A disdainful look filters through their eyelids, dominated by the strange deformation of the top of their heads. These are shaped



Mangbetou mother and her child



Nobosodrou, a Mangbetou woman

like an egg, after the manner of Egypt in olden times, when this hint of their esoteric beliefs in the origin of the world was a sign of the omnipotence of the Pharaohs.

A coiffure in the form of an aureole, ornamented with pins made out of the tibia of a monkey, spreads out behind their egg-shaped heads. Bracelets of copper and carved ivory, a minute apron fastened by the hair of an elephant passing around their hips, which are ornamented behind by a flimsy covering of basketwork wrought with geometrical designs—such form the ornaments of these fair nudities, to whom they give the chaste appearance of statues with eyes of enamel.

These are the twenty-five wives of N'Ganzi, formerly a redoubtable warrior, the five favorites of old Boïmi, a polished diplomat, and the two caryatids who share the heart of Touba, a rich Matchaga recently elevated to the nobility.

For we have here really a question of nobility. We are far from the grossness of the primitive races. The Mangbetou is proud of his traditions. He possesses marks of refinement, small feet, delicately shaped hands, like the Ethiopian aristocrats. The Matchaga, of whom Touba is a type, were formerly the slaves of the Mangbetou and present the characteristics of the Bantu—a lack of elegance both physical and moral. Richer now than their former masters, they possess the best-looking wives, and the best villages built according to the canons of Mangbetou art.

Like Iacovleff we also think that there is unquestionably a Mangbetou conception of art. The form of the huts with pointed roof supported on a peristyle of sculptured columns, the mural paintings with which they are decorated, the architecture of the millet granaries, which are like little temples, the trumpets made from ivory, and the stools fashioned from rare woods, all give evidence of a sense of harmony of line and composition which it is disconcerting to find among natives who were still cannibals a few years ago.

Primitive art is never anything but a rude copy of the forms of nature. With the Mangbetou, on the contrary, an aiming at a style is manifest. The mural decorations are a simple play of geometrical lines and bright colors; they are purely for ornament and never, for one moment, possess the childish character of the drawings we noticed on the huts at Oubanghi; the same remark applies to their basketwork and pottery, their harps, and trumpets fashioned out of ivory.

When a Mangbetou artist reproduces human features he accentuates the prolongation of the skull and misrepresents the features of the face in such a way as to compose a real scheme of decoration, which derives its harmony from the proportions given to lines and quantities. Have we not here the actual basic principles of a great sense of art?

Moreover, among the races we have seen, the Mangbetou hold a quite special place. They seem to bear the impress of ancient civilization, the passing away of which has given them time to crystallize it amongst themselves, just as sepulchral monuments have closed down over the mummies of the Pharaohs. Brought to the light of day by modern explorations, in much the same way as the treasures lying in the Valley of the Kings have been unearthed by recent excavations, the Mangbetou do not show the crude boorishness of new races, but the dying charm of ancient characteristics.

Here we see the fair Ourou, with her copper tint and enigmatic air, whose voluptuous walk recalls the style of the famous courtezans; and over there is Nobosodrou, whose disdainful pout and haughty pose are worthy of a Queen of Sheba.

"Come to Ekibondo's village," says Monsieur Vindvoghel, the distinguished representative of the King of Belgium, who is deeply interested in native customs. "You will think you have come to the domain of King Pausole."

It is a tempting proposition, but Monsieur Devaux has already gone on ahead to organize our hunting expedition in the Congo on the territory of Chief Wando. We must therefore join him, without delay, at the camp at Mabelini. And so with regret we leave Iacovleff and Poirier to pass artistic hours among the Mangbetou, of whose charm we have had a short and appreciative glimpse.

AMONG THE MANGBETOU.¹

The time of day among the Mangbetou is not reckoned by hours; it writes its own record. They are not like the hours in the Western world, so like each other that we have to number them in order to note their passage, saying one o'clock, three o'clock, etc. Here we say: the hour when the foreigners arrived, the hour when the little children feel cold, the hour of the fireflies. We do not talk of lunch time, for here one eats when one is hungry. The time of working is very short, and the time of dancing lasts at least half a day, as well as all night when the moon is shining.

We have just been sleeping in the hut reserved for foreigners to which Ekibondo, as soon as we arrived last night, conducted us in person, carrying with him the fetish of welcome consisting of two panthers' teeth.

Rectangular in shape, the foreigners' hut, made of reeds and bamboos, is raised upon tiles and dominates the central square in the village, a great space of hard ground where a few oil palms are growing. All around is a wide circle of clay huts, covered over with designs in many colors, and surmounted by large pointed roofs made of fine grass. In the middle is a millet granary resting on sculptured mahogany columns; opposite the hut of the foreigners is the tribunal where Ekibondo dispenses justice.

There is complete silence; the doors of the huts are closed.

¹ Notes by Léon Poirier.

Not a breath of wind; the palm trees stand motionless. The village is still asleep beneath the dim light of early dawn. Suddenly there is a tint of delicate rose in the east, against which stands out the mauve silhouette of a goudougoudou, on the top of a large ant-hill, sheltered by a small roof.

Our Western instincts make us think that the goudougoudou will shortly resound to awaken the village; but the goudougoudou remains mute, for it would not be in accordance with Mangbetou ideas to begin the day in such a sudden manner; it is more seemly to let everyone wake when he pleases.

One by one, the doors glide open for the passing out of women still half asleep, whose first care is to light the fire. A light blue smoke rises before each hut, and the air is filled with aromatic odors.

Soon the sun has dried up the dew, and when that has happened the Mangbetou day begins. A summons given on ivory trumpets, the three notes of which are like a carillon, resounds from the direction of Ekibondo's dwelling, which is invisible to us, for the square on which the foreigners' hut is built is only an accessory to the village, a kind of agora or forum, around which are grouped the huts of the serving-women.

The whole village is composed of a certain number of cleared spaces among the palm and banana trees, where streams of limpid water are flowing, and narrow paths connect them with each other. In each open space there is a principal dwelling, huts for servants, and a millet granary, beneath which is the kitchen.

Ekibondo has his own clearing; Djendo, his first wife, has another; and as there is one for each of his other favorites, which she retains even after she has ceased to be a favorite, the clearings are rather numerous.

In short, Ekibondo reigns supreme, not only over one

harem but over a group, from which he derives both his pleasure and his supply of labor.

We direct our footsteps toward the clearing from which is rising the sound of the trumpet giving out a sprightly rhythm. The musicians, standing in a row, are offering a morning serenade to their gracious lord, who comes forth from his hut wearing a loin-cloth of stuff woven from red bark and fastened by a copper belt. His muscular bust appears to be issuing from a corolla.

As soon as he catches sight of us he advances, tripping a ballet step, followed by his row of musicians, who are joined by other personages—Negera, the favorite of the day, and certain friends among the notables. The order observed by this impromptu procession symbolizes the different social castes among the Mangbetou: at the head comes the chief; next, the favorite; then the musicians, and last, the officials.

Ekibondo is making his morning visit round the village. We come to the clearing of Djendo, the first wife, whose severe countenance contrasts with the smiles of the women around her, who are engaged in making their toilet. Djendo's duty is to see that her spouse is well served and satisfied.

We learn that the *nekbe* adorning the base of the hips of the Mangbetou women does not originate from esthetic reasons or from a sense of modesty; it is a portable straw mat for the purpose of preserving these ladies from the contact of the grass when they sit down, and from the bites of insects.

A specialist, with the action suitable to a chiropodist, is painting elaborate patterns on the back of a youngster, in a light brown color made from the juice of a gardenia.

No woman in this assembly is wearing the aureole coiffure of the fair Ouron and the enigmatic Nobosodrou. When we remark upon this to Ekibondo he declares that he is

very much annoyed over the question, but the women will no longer wear this coiffure, which, they say, gives them a great deal of trouble. Now we were aware, before leaving Europe, of this same vexed question there of wearing long or short hair, and we can only sympathize with Ekibondo's trouble.

Moreover, our host is not without his misgivings for the future, as the women—the Mangbetou women, I mean, of course—have been showing for some time past a troublesome spirit of independence.

A gang of women, chained like prisoners serving a sentence of hard labor, is engaged in sweeping the ground of the village public square—probably, we imagine, insubordinate wives sentenced by Ekibondo. But Monsieur Vindevoghel explains that they are really unfaithful wives. Their punishment is to keep the public thoroughfares clean. This is doubtless the reason for the village being so well swept.

Ekibondo is a good father and likes playing with his children; he has thirty, which is not a large number for fifty-three wives. He shows us with pride a delicious little mite of five or six years with an oblong head of adorable aspect, and then another little one, with scared eyes, whose skull is bound with little cords of giraffe's hair, being in process of acquiring the traditional shape.

Almost everywhere the meals are being got ready; millet and banana broth is cooking in earthenware jars covered over with leaves. A woman is shaking little grains in a flat basket, like those used in sifting coffee. When seen closer these little grains are found to be winged ants; the bodies only will be roasted, or stewed, to make a very rare dish.

As it is midday we return to our hut to eat something less exotic. At the end of our meal Ekibondo comes to pay us a visit. We offer him a glass of whisky, and the

conversation becomes very cordial. It is interrupted by the arrival of Djendo, come in search of her noble spouse, whom she carries off just as a respectable woman carries off the father of her children from the ale-house. We are somewhat embarrassed.

In the afternoon Ekibondo's neighbor, Nafarangi, comes to pay him a visit. He arrives accompanied by quite a suite of women and musicians. Ekibondo receives him surrounded by a veritable court, in which questions of precedence are evidently very important.

The court is arranged in a semicircle under the shade of palm-trees. Ekibondo wears round his loins the skin of a panther, the tail of which, ending in a red tuft, clearly indicates an ornament of phallic origin. He is seated on a folding chair in the center of the half-circle of women squatting on their ebony stools. Djendo, on her stool studded with copper, is on the right of her spouse, but a little behind; the notables are on the left hand, at a respectful distance, and behind them are the musicians standing; the favorite is also among the women. The etiquette prevailing at Mangbetou receptions has none of the freedom of small chance gatherings.

In order to test their artistic sense, of which the Mangbetou give such curious indications, we show some of Iacovleff's portraits to the assembly. The interest aroused by them is extraordinary, and never did an exhibition of paintings meet with such an enthusiastic public—the cries of delight, smiles and exclamation of "you-you" never end. Delight becomes delirious when the crowd recognizes the rich Touba, who appears to enjoy a high reputation among these ladies.

The artistic sensibility of the Mangbetou is a fact. Do they owe this to the traces left by some former culture, or does the deformation of their skulls exert any influence on the tendencies of their minds?

Inevitably the reception terminates in a general dance; the two chiefs give the signal by a rapid and obscene dumb show, while their wives clap their hands in time with their admiring cries of "you-you." When the dancers pause, one of them takes a banana leaf and with it wipes their bodies streaming with perspiration.

Then Negera, the favorite, executes a frenzied jig of so special a character that, wishing to have a slow record of it taken by Specht, I asked the dancer through the intermediary of Monsieur Vindevoghel, to do it over again. Negera at once is quick to understand and takes to flight with all the speed of her graceful limbs, after declaring that she has danced very well the first time and that the *mousoungou* (white man) wants to make fun of her.

Ekibondo, who is very much captivated by her, says that she is put out and he can do nothing.

Happily Monsieur Vindevoghel is a Brussels man of a very Parisian turn, and is not dismayed by the caprice of women. We watch him passing under the banana trees in the direction taken by Negera in her flight; a few minutes afterwards he returns, elegantly holding the favorite, now all smiles, by the arm. I ask the vanquisher how he was able to persuade her.

"It was quite simple," he replies. "I said just the proper thing to tell a Mangbetou woman: that you thought her pretty and that you had sent me to ask her in marriage!"

Negera was taken by the cinematograph (at slow), but notwithstanding her charms I did not marry her.

Soon Nafarangi goes home, but the night now falling does not stop the dancers. As there is no moonlight, Ekibondo decides to transform the seat of justice into a ball-room.

"Let us go and dine," says Vindevoghel, who finds this very Mangbetou notion is lacking in dignity if not in sporting instinct.

Quiet reigns around us during our meal; the light from our lantern throws out scintillating gleams intersected by the shadows cast by the sculptured columns supporting the roof. We see the slender silhouettes of young girls, boys and children who, taking advantage of the absence of their elders, are furtively coming close to our hut. We hear softly uttered words, giggles, and whisperings; their eyes, rolling in their dark orbits, display the whites against their ebony background.

They are like little animals full of grace; they gradually grow bolder and in a thin piping voice say to us things which we cannot understand; they try to touch our knees and interrogate us with a look. We give them chocolate, which at first they munch apprehensively, and then with the greediness of young cats. A voice intones a cadenced chant on a solemn note, a kind of farandole is organized, and in the wavering light the young bodies of girls and boys pass and repass in artless but alluring poses.

We take a turn round the tribunal. The assembly is in full swing. A few primitive lamps, burning palm oil, cast over the swarming hall a fantastic chiaroscuro. Eki-bondo, clapping his hands and swelling out his chest, marches round in step, accompanied in Indian file by his entire orchestra. Sometimes he stops and pretends to listen by bending his ear to the ivory trumpets, which are turned toward him; sometimes he bounds in the air, like a beast rampant, while the trumpets are raised and lowered, and turned to right and left to follow his movements.

But now he is tired. He goes to lie down, in the pose of a young actor, on a bench with a strange back consisting of a shrub bare of leaves like a parrot's perch, over which he hangs his arm in a negligent attitude. Then Djendo, who is sometimes so severe, fusses around her master and brings him his pipe of hemp and his gourd of millet beer. Nginga, who now occupies in contravention of official eti-

quette the place of honor on the bench, is smoking a kind of narghile called a *lasso*. The sound of the five-stringed harp rises through the intoxicating smoke, and the women begin to mimic, in front of their master, the slow voluptuous rhythms.

Ekibondo cannot keep still. He sits upright impelled by a force of which he is no longer master, and the whole bevy of women resume their seats on the little ebony stools. Their bodies are dripping with perspiration; a few *nekbe*, the last vestige of covering, fall to the ground; couples disappear and go out into the night.

Ekibondo can possess himself no longer; he is standing on the platform, with his eyes starting out of their sockets; his movements become quicker and quicker; his loin-cloth of panther skin waves aggressively; the women give vent to half-fainting yells, and a suffocating atmosphere of sensuality broods over this bestial scene.

Outside we again find the sweetness of nature in repose. The night is warm, the sky is bright with stars, and innumerable fireflies chase each other under the palm trees.

Two shadows are crouching before the door of our hut. A woman's voice murmurs sorrowfully:

"White man, do not go to sleep yet, for I have to tell you something. I am Kotiané. The girl who is sleeping on the threshold of your dwelling is Molendé, the favorite daughter of Chief Ekibondo, your friend. She is also my own child. Her breasts are still quite small, her skin is as soft as a butterfly's wing, her eyes are long as the almond of the palm. Ekibondo told me: 'Tonight you will take my favorite daughter to the white man, for I wish to be agreeable to him after our custom.' White man, I am the mother of Molendé, but I must obey, and so I have made her put on her prettiest loin-cloth, and there she is close by you."

Here is a sweet fresh moment of maternal love amid the disturbing hours of Mangbetou sensuality.



A Mangbeton village

"Kotiané, Mama, take this piece of money and go home with your child."

Then the shadow which has seemed to be sleeping before the threshold gets up very quickly and disappears.

HUNTING IN THE CONGO DISTRICT.

While Poirier and Iacovleff are having a taste of African poetry in the setting of a negro Capua, we join Monsieur Devaux at Mabelini. He is awaiting us there after organizing a hunting safari consisting of a hundred porters.

Monsieur Devaux is a living proof of the law of contrasts. His important and pacific functions as resident judge are no hindrance to his knowledge of organizing an elephant hunt with a master hand.

Moreover, we are expecting to meet not only elephants, but also buffaloes—the black buffalo of great size and massive proportions—and the white rhinoceros, which is a very interesting animal. A little larger than the black rhinoceros of the Oubanghi district, its skin is of a lighter gray and on its muzzle it has two horns square at the base. Its head is longer than that of the black rhino. It is not to be met with over the whole of Africa and seems to live exclusively in the region of the lakes and the Bahr-el-Ghazal.

It is towards the southerly portion of the latter region that we set out, en route for the village belonging to Wando, a native chief of whose qualities as a hunter Monsieur Devaux has personal knowledge.

We are taking weapons of heavy caliber: two Holland and Holland 465's; two 375's, excellent for stopping a buffalo or lion; a 12-bore shotgun with cartridges of fine shot for small game, and buckshot for any hyenas or panthers which may approach the camp during the night. Last, a large Colt revolver to finish off the animals.

Wando joins our safari, bringing with him his favorite wife, and some servants. We reach Binza at eight o'clock

in the evening after difficult going, for we have had to cross several marshy streams in which we sank at times up to our waists in the muddy water.

The information which has been gathered concerning the whereabouts of elephant herds points to the necessity of taking our hunting camp to the village of Bokinda, a distance of four hours' travel farther to the north. With a view to beating the ground that lies in between we divide into three parties; Audouin-Dubreuil's party will go to the east in a semicircle; Haardt's party will make a similar movement to the west; Bergonier, with his taxidermist equipment and the convoy of porters, will take a straight line.

*April 1.*¹—I leave Binza at six o'clock in the morning accompanied by Monsieur Devaux. Wando is with us with a few porters and trackers, also three gun-bearers. On a stretch of open ground, intersected by numerous marshes and *potopotos* surrounded by papyrus, the water is up to our waists.

The first elephant, with no tusks and as high as a monument, passes within one hundred yards, but Wando exhibits an expression of contempt for this toothless animal, and we do not fire.

9 A.M.—We come on the track of rhinoceros. The trackers press on so as to come up with the animals before midday.

11.30 A.M.—A rhino in sight. Monsieur Devaux gets onto the top of an ant-hill, leaving to me the honor of firing. I go forward with my tracker and gun-bearer. The head of the rhinoceros is seen above a bush. It is a full-grown one of great size. I take my 465 Holland loaded with solid bullets, and when I get to a distance of thirty yards I fire at its head. The wounded animal charges, but its pace is retarded by its wound. At my second shot,

¹ Georges Marie Haardt's report.

which it receives at ten yards, the rhino, a splendid bull, makes a half-circle to the right and falls to the ground thirty yards from us. The coup de grâce is administered between its two ears. I then send a message to Bergonier, and we take a short rest while we are lunching. We leave two men near the rhino, and go on toward the river Aka.

After proceeding for an hour, we make a quick survey through our field-glasses which reveals a spectacle given to few hunters to see: a herd of buffaloes, four white rhinos, *bubals*, and *tagbwois* antelopes. We decide for the buffaloes. The approach is difficult; only a few ant-hills offer any cover. The wind, fortunately, is favorable. We fire. The whole herd takes flight. One animal, only, falls. While the porters are cutting off its head and feet, Monsieur Devaux brings down a *tagbwois* antelope.

4 P.M.—We are approaching within eighty yards of a fresh herd of buffalo. Still open ground. Two beasts fall bellowing to the ground, when Monsieur Devaux and I fire. Suddenly the bull of the herd, which has come back to a distance of only fifty yards from us, is seen standing motionless on our left; it surveys our small group and is ready to charge. Monsieur Devaux takes rapid aim and fires. I reserve my two barrels in case it charges. The animal is hit, makes a double turn and goes off at a gallop. We start off in pursuit, keeping an attentive eye on the brush, for often a wounded buffalo goes round in a circle and takes up a position on your path so as to make a surprise attack. But after we have gone a half-mile we find our quarry in its last agony behind a bush in which it lies entangled, kicking out with spasmodic movements, the sound of which attracts our attention.

We leave some natives to watch over it and continue on our way. Shortly afterwards Wando points out to me, through his field-glasses, three elephants at a distance of five hundred yards. One of them seems to have fine tusks.

We cross a *potopoto* dominated by rising ground on the top of which, on our right, a buffalo is outlined in the declining light. Another, which seems to be wounded, is lying beside it. Their attitude is clearly hostile, and no animal knows how to show this more unmistakably than a buffalo. But we leave them alone, for we desire to get near the elephants. When we get to within two hundred yards we notice that they possess only moderate points so we decide to return to the buffalo. Still preserving his sculptural attitude, he turns to face us. I aim on one knee, fire, and wound it in the head. The second buffalo, which has been lying down, gets up at once and the two animals go off at a gallop. We follow the blood-stained track of the wounded one, although we are tired after our uninterrupted tramp of twenty-five miles. After a pursuit of a mile the animal is shot dead.

Our bag consists of one rhino, five buffaloes and two antelopes.

6 P.M.—Three hours' walking still separates us from Bokinda where our camp is to be. On our return journey we are obliged to keep a sharp lookout for elephant herds, for we are crossing their tracks in the darkness—now completely fallen.

After two hours' tramping the note of the goudougoudou, sounded from Bokinda, gives us a better idea of the direction to follow, and at last we reach the camp, where we find Audouin-Dubreuil. His bag consists of one elephant, one cow rhinoceros, one baby rhino.

Bergonier, who has had to divide himself throughout the day between the two parties of hunters, arrives with a portion of the spoil. He is overflowing with exuberance. While we are smoking a welcome pipe after dinner, Audouin-Dubreuil gives us the following account of his day:

"In the morning I came across fresh traces of elephant

and rhinoceros on the banks of the river Ombo. Their passage had left broad and deep foot-marks on the damp ground, some of which, here and there, were noticeable as being more clearly defined. These imprints indicated the places where the animals had stopped, either to eat, or to inspect the horizon and take the direction of the wind.

"With my trackers I climbed a slightly wooded hill, going up in a gradual slope toward the north. It concealed from our sight a broad depression in which a herd of ten fully grown elephants, and five to six little ones, was outlined against a background of papyrus. On our left four other groups were seen, gray against the horizon. When examined through my field-glasses they seemed to be larger than the others; this was also the opinion of my trackers, and they made me understand, with the aid of a great deal of gesticulating, that I ought to make for the former. Perhaps they were not anxious to come to close quarters with the larger elephants, among which were two or three females, dangerous to approach in the open ground before them.

"It was necessary first of all to take the direction of the wind. The soil was level; a few small stunted bushes and two or three ant-hills barely afforded us any cover. However, the elephants seemed to be unsuspicious; they were standing two by two, under the shade of some tall thorn trees crowning the rise.

"One of them appeared to have enormous tusks. I went forward alone, and soon found myself completely in the open, but with their short eyesight the elephants were not yet able to see me; nevertheless they seemed to be uneasy. Had the wind changed? I went on, crawling on my stomach. The elephants were very clearly outlined against the blue sky. They seemed to become more and more uneasy. When 150 yards from the largest one I rose and fired. The animal reared and fell forward.

"The herd did not make off. The huge animals stamped on the ground and turned round and round, waving their trunks and ears in sign of distress. Two females began trumpeting desperately in front of the victim; they tore up the grass and branches from the trees, placing them over his body. The elephants displayed great anger for several minutes, and continued to throw grass, not only on their wounded brother, but also on themselves.

"The trackers gave me to understand the necessity of beating a retreat and taking shelter behind a curtain of trees a hundred yards farther away. When we had reached this place of safety the blacks whistled a few strident notes; the elephants soon calmed down and went away slowly toward the east. We went up to the victim. The trackers walked all round examining it: then one of them went behind and pulled its tail. No sign of life. Death had done its work. The ball had struck the lobe of the ear and had come out at the back of the neck.

"We resumed our forward march. Traces of rhinoceros were noticed shortly. I followed them, after leaving behind near the dead elephant a portion of my equipment, my rations and even my water-flask, so as to lighten me. The traces went across a small depression, at the bottom of which a marshy rivulet covered with papyrus made walking difficult. Then the ground rose; it was sprinkled over with stunted bushes.

"The trackers halted, and pointed out what I took to be an ant-hill; looking more attentively I made out a massive grayish form. It moved and lifted its head—a hideous horned head; it was a white rhinoceros.

"It was three hundred yards away from us. I moved in an oblique direction so as to catch the wind. Forty yards now separated me from the animal, a female of huge size; its calf, as big as a young bull, was gamboling and frisking round its mother, while she was engaged in digging into the ground for roots and tubers.

"I put my rifle to the shoulder and, aiming at the ear, fired. The rhinoceros made a bound. Another shot, and it fell to the ground, but got up immediately, covered twenty-five yards in my direction at a gallop, and then rolled on the earth with a noise like the tilting of a loaded truck. It lay stretched out at the foot of a tree, beating the ground violently with its head. Its calf was looking at it without moving. Going to within a few feet of it, I photographed the animal as it lay. With a last dying effort the brute rose again and again charged. I quickly made myself scarce; happily the rhinoceros, like the elephant, is short-sighted; it passed close to my side, while a tracker handed me my Express.

"The rhinoceros was able to make a rush of thirty yards at full speed. It received two bullets in the loin, and turned round with extraordinary suppleness. I fired again; the animal fell and again got up. Three more bullets were required to finish it off.

"The calf, which we had forgotten, went to its mother and began to walk round her; and it then made a rush at us. When it had got to within sixty feet of our party, it suddenly stopped, looked at us, grunted, and returned to its mother's body.

"I wanted to let it live, but it came toward us in such a threatening manner that I decided to fire; I missed it at a distance of a few yards, the ball glancing over its thick hide. The natives scurried off panic-stricken. I fired again, and it fell to the ground; a tracker pierced its belly with his lance. It died giving out a cry like a pig bleeding to death."

We finish relating our hunting experiences for that night. In the distance we hear a lion roaring, and nearer at hand the cry of a hyena. The blacks renew the fires round our bivouac. Our pipes are out, and overcome by that healthy fatigue following long days of hunting, we betake ourselves to our tents.

April 2.—We rest. Monsieur Devaux goes off by himself with his trackers after an elephant.

Bergonier, who went back yesterday to find Audouin-Dubreuil's rhinos and elephant, returns looking harassed, with his clothes all torn, and followed, like a barbarian chieftain, by a long procession of natives carrying the bloody remains of our victims. His faithful Moussa prepares him something to eat, and we listen to the account of the night he has spent.

"You will remember," he says to Audouin-Dubreuil, "that there is a large swamp between the spot where the elephant fell and that where you found the rhinoceros. I was floundering about in it at nightfall when several lions began to roar. My blacks informed me, through Moussa, that it would be imprudent to go on farther. I shared their apprehension, but anxiously asked myself where to camp, for we were already half up to our knees in the swampy ground and we could find no dry spot except the round top of an old ant-hill. However, for lack of anything better, I took up my position there, without even being able to lie down, while the natives made two or three attempts to make a fire from the green grasses, which smoked terribly and refused to break into flames. To crown our misfortunes, a tornado of rain broke upon us. Cramped with fatigue and soaked to the skin, I passed the night in the rain without closing an eye, for fear of losing my balance and falling off my perch into a lake of mud. There was no longer any question of lighting a fire, and the lions were roaring all the time.

"The rain ceased before daylight; at the first gleam of dawn I gave the signal to leave the spot. When I arrived where the dead bodies of the animals were lying, I found that the lions had made a large breach in the stomach of the calf, but had made a vain onslaught on the thick hide of the grown rhino."

Monsieur Devaux returns in the evening; he has killed an elephant.

Bergonier will not confess to any fatigue. He goes off again with a larger number of blacks than he took the night before, in order to "clean up the battle-field."

April 3.—It has rained all night.

Lions and hyenas, attracted by the remains of our victims, have not ceased to roar and howl around the village in a sinister manner.

This morning the chances of a successful lion hunt seem to be good, but we prefer to try our luck with the elephants, which causes a black porter to say: "If we had tusks the white men would kill us all!"

6 A. M.—We start off with Monsieur Devaux and Audouin-Dubreuil. Wando accompanies us. A full complement of trackers. A long tramp to the river Aka.

1 P. M.—During the morning we meet several herds of elephants, but with too small points for us to think of firing. In several places our way is barred by marshes; these we cross with the water up to our waists, and even to our shoulders. The sun is now scorching us, and we experience a certain amount of lassitude. Our trackers come back and report that they have found quite fresh traces; we set out again briskly. After an hour of hard tramping we see four elephants—one of them very large—standing motionless under a clump of trees at a distance of two hundred yards. I go forward with Wando, who has become very nervous. We halt on a rounded ant-hill about sixty yards from them. The conditions are not favorable for firing; however, at Wando's earnest entreaty, I fire at the bull of the herd; only the top of his body is visible, the lower portion being hidden by a smaller animal. The wounded elephant goes off in a direction parallel to the way we came, while the rest of the herd face us in a threatening attitude, raising their trunks and flapping their ears.

Monsieur Devaux leads us off in rapid pursuit of the wounded elephant, to which the coup de grâce is given about a half-mile farther on. It is a very large animal with fine tusks. Bergonier will come and operate on him tomorrow. It requires twenty-four hours' hard work together with the aid of Moussa, to amputate the head and feet. Forty men are needed to take away the hide and head.

We shall have to leave some natives to protect the body against marauding wild animals; but in spite of the weapons we place in their hands and the small fortune we offer them, the blacks earnestly beg to be allowed to go with us, for without a fire they say they are powerless to keep off either the cold or the animals. We have forgotten to bring our patent fuel, and it is in vain that we try to strike our matches, still wet from the numerous cold baths they have taken. What is to be done? One of our party takes a piece of fabric, torn from a loin-cloth, places it at the end of the barrel of a gun and fires into the air. The fabric catches fire and falls into a heap of dry grass like a lighted fuse. It begins to crackle, a few small twigs are thrown upon it, and the flame rises up clear in the gathering darkness. The blacks will now remain.

We turn our steps in the direction of Bokinda. Wando appears to be very uncertain of the way. He makes frequent stops in an endeavor to hear the goudougoudou which the women have orders to sound at regular intervals. Wando listens so intently that he seems to be trying to coax it with his eyes. One of the trackers suddenly hears the note of deliverance, which our European ears cannot yet catch.

Midnight.—We are getting near the camp. The women come forward to meet us carrying lighted torches. Poirier and Iacovleff have left a message telling us of their departure toward the south in quest of the pigmies.

April 4.—To our tent, transparent under the first rays of

sunrise, Wando's wives come to pay us a visit. They are not like the Mangbetou; nevertheless they have charm. They have put on new clothes this morning—fresh leaves gathered from the shrubs in the savanna.

Leaning against the entrance to her hut, our neighbor, who is quite a young girl, is looking at them jealously and playing the coquette to attract our attention. Every morning we have watched her as she makes her toilet. Standing entirely naked before a dwarf banana tree she makes a lengthy examination of the leaves, compares them, cuts off one and attaches it to her girdle with a modest gesture like Eve after her fall.

10 A.M.—An enthusiastic message from Bergonier: he has discovered in the protuberances of the vertebræ of the neck of the big elephant an unknown parasitic larva.

3 P.M.—We start off after lions and come across buffaloes. It is impossible to get near them for the wind is against us and is bringing up from the south the black clouds of an approaching tornado. Hardly have we got back to our bivouac when the tornado bursts, and we have difficulty in preventing our tent from being carried away. Baba, like another Gribouille, makes himself entirely naked "to avoid getting wet."

April 5.—Bergonier has not returned. The big elephant has given him some work. He will rejoin us at Mabelini. We take final leave of Bokinda.

4 P.M.—We bivouac at Binza, where we again find Wando's wives. When night falls they will dance by moonlight, and it will be a beautiful sight we shall not forget.

April 6.—We return to Wando's village. He has taken off the European costume he wore while hunting, and has resumed that of his ancestors. On the top of his skull is waving a head-dress of red feathers; a line of ocher accentuates the contours of his breast. Thus arrayed he comes to bid us farewell.

I explain to Monsieur Devaux, who is an excellent interpreter, that I wish to offer a present to Wando in order to testify my satisfaction over the splendid results of our few days' hunting. Monsieur Devaux transmits my wishes and inquires of Wando what would be likely to tempt him among the different things making up my equipment. Wando examines, each in turn, my guns, my field-glasses, which he calls "talatala," my sticks and revolvers. Would a phonograph be likely to tempt him, or a suit of clothes? I suggest one in my portmanteau—khaki, naturally. No, that won't do; Wando must have a real European suit of a more attractive color. He looks fixedly at the lining of my sun-helmet, which I am holding in my hand, for the day is drawing to a close; it is light red.

"If the white man would send me from Europe a suit of this color, together with his good wishes, I should be quite pleased."

But his favorite wife has come up. She speaks softly to him in her musical voice, if we may hazard a guess, words of no light meaning. This exceptional woman knows how to place her charm in the service of reason; gently disapproving of Wando's affectation, she urges him to choose the utilitarian shotgun and cartridges.

April 7.—Thirty kilometers to Mabelini, where we arrive at midday. Bergonier is there. The mechanics, who have been warned of our approaching arrival, have got ready a tasty meal, after which we start on our way again toward Faradje and Adranga, in the direction of Lake Albert.

NAKED TRIBES.

Bergonier classifies all our trophies at Faradje and superintends their dispatch to France by way of the Nile. The epilogue to our hunting in the Congo is the departure of Resident Judge Devaux. This amiable and valuable companion of days which have flown too quickly is returning

to Buta, which already lies more than seven hundred kilometers behind us.

To make friends, to live with them in close comradeship for a few days, and then one morning to say good-by—such is the lot of wanderers like ourselves.

Faradje marks the beginning of a new country. The altitude is higher and it is almost entirely without trees; these two basic conditions suffice to modify the aspect of nature and of men. The route, still excellent, traverses vast prairies, where small clumps of trees are to be seen here and there, and is shut out on the horizon by the outline of the mountains bordering East Africa. We see coffee plantations and large fields of millet, sweet potatoes and manioc. Agricultural Africa is here a reality. The people of these regions belong to the Logo race. They are laborious husbandmen. Is it their labor which has rendered the land fertile, or is it the fertility of the soil which has encouraged the Logos to work? In very truth, we cannot dissociate the Logo population from the land they inhabit any more than we can dissociate the Beaucerons from Beauce. In both cases, land and people are parts of one whole.

The rough Logo differs profoundly from the elegant Mangbetou, whose slave he was formerly, and whose yoke he shook off by force. For long the Logo peasants cultivated their land, bow in hand. They possess the energy and rusticity of border people, for, as the foremost representatives of the Nile population, they still hold the conquests they have made.

Speaking generally the populations of the Upper Nile basin are called Nilotic. We are bound to say that in spite of their virtues the Nilotic races, the Logo, Lougouaré and Allour, look like barbarians when compared with the semi-decadent refinement of the Mangbetou. We have done with elegant women, well-shaped hands, the courts of negro

kings, painted huts, sculptured ivories, ebony stools, music and dancing; we have left behind the realm of art. The Logo is ugly; from the old Egyptians, of whom he was formerly the servant, he has retained only the custom of pounding grain between two flat stones. In the dwelling of Maruka, the Logo chief whose village is close to Faradje, we see women occupied in preparing millet flour, and Iacovleff remarks how like is their action to that of a certain statuette he noticed in the museum at Cairo.

Maruka, who receives us with the cordiality of a rich farmer, wears the same loin-cloth as Boïmi, Touba or Ekibondo, notwithstanding he might be described as a valet wearing the costume of his former master. On the other hand, Maruka gains on knowing; he gives evidence of sterling moral qualities. He holds his family in respect and carefully keeps up, in the middle of the village, the tomb of his father, whom he succeeded in the government of the domain. It is a hut in miniature, before which Maruka offers his homage, invoking the spirits of the departed to ward off the tornado, locusts, and the ravages of elephants, and craving their aid when he sets off to hunt.

Hunting is the national sport here, as dancing is among the Mangbetou, and this fact sufficiently characterizes the two races. In front of Maruka's hut there is a bench similar to that which serves Ekibondo as a lounge when he wishes to rest his arms, but its back is garnished with all the trophies, horns, skulls or feet, which Maruka's subjects are bound to hand over to their sovereign each time they kill an animal. This is an excellent method for keeping an eye on poachers of forbidden game, such as elephants and rhinoceros.

The Logo huts are the largest we have yet seen. Simple roofs of thatch, barely separated from the ground by a very low wall, they look like hayricks, and the door is so small that a man has to bend double to enter.

Maruka is anxious to let us know that he too possesses many wives and that the art of dancing is not foreign to him.

His wives are primitive in form: their build is in straight lines, their limbs are cylindrical with shapeless joints; they are without grace, but possess "a beauty of mechanism which is well designed for very definite functions," in the words of Iacovleff. In short, their beauty is a little cubist, and their nakedness is still more complete than that of the Mangbetou women, and is not so pleasant to contemplate. Their dancing is a kind of shuffling about in one place, and is as heavy as that of a dancing bear.

But Chief Maruka scores when he takes us to see his coffee plantations; he contemplates them with the expansive smile of a large landed proprietor, well satisfied with his harvest.

The Lougouaré, a pastoral race which we shall meet with a little farther on in the territory of Chief Adranga, offer the same characteristics as the Logo, but exhibit one special mark: they are entirely naked; at least the men are, but the women wear a little tuft of horsehair of infinitesimal proportions.

The Lougouaré men wear neither bracelet nor necklet; their only ornamentation is a small piece of copper hanging to their ears. This absolute nudity, of which we have found no other example throughout the whole of our journey, gives us a strong impression of primitive humanity in process of evolution from the animal kingdom. The bodies of the Lougouaré are sculptural in their proportions; they often reach a height of six feet, six inches, and their walk is full of pride; the unconsciousness of their nudity would seem to show that modesty is not an innate sentiment in human nature. Neither the cold nights, nor the urgent solicitations of the missionaries, nor the jeers of neighboring tribes, have so far availed to make the Lougouaré

modify their "costume," for the women are jealous of its preservation, imbued as they are with the idea that a man who covers himself has some blemish to conceal.

The young people whom their parents destine in marriage may not see each other except in the presence of their elders; they must avoid any kind of meeting in any public place, or in public assemblies.

To the southwest of the country of the Lougouaré the auriferous workings of Kilo-Moto begin. Watsa is a center of alluvial workings in full production, and we shall shortly see at Kilo the veins of quartz being exploited by the most advanced methods of modern industry. Before our arrival, Bettembourg and Brull have been able to make a study of the enterprise of our Belgian friends which is so manifest throughout their domain.

Before reaching Kilo, we passed through the farm at Nioka, where the possibilities of stock-breeding and agriculture in the district are studied with method. The possibilities are great in this mountainous region where the climate undergoes a great change. We have not ceased to rise since leaving Faradje, and when we reach the farm at Nioka we have ascended 5,500 feet; after the drought of the Sahara, and the dampness of the equatorial region, we come to the more temperate climate of the high African altitudes. It is a new country which seems to remind us of old and distant Europe, but a Europe very much improved, where there is never any winter. The nights are cool, the palm trees have disappeared, bananas have taken refuge in the hollows of the ravines, and the highlands are covered with short, thick grass, making excellent pasture. The rough Allour who inhabit these mountains possess herds of oxen, and the Belgian colonists are in process of attempting successful experiments in cattle-breeding like those which have succeeded so marvelously in the mountains of Kivu, a little farther south.



Makéré dancing women

The route winds up steep ascents, climbs over peaks, and crosses mountains sometimes of an altitude of 8,000 feet. The aspect of the mountains is entirely different from that of the Alps or the Pyrenees. The High Plateau and the Sierras of Castile are more like the rounded contours characterizing the African mountains; there are no sudden clefts nor sharp peaks. Erosion has worn down the dioritic rocks, transforming them into red earth in which are found the minute deposits of gold that enter into their composition. Nature has slowly closed up the wounds of the initial cataclysm, and the African mountains wear the aspect of swellings covered over with a carpet of green grass. Being of volcanic origin, they are due to upheavals and not to tilting.

About thirty miles after we leave the workshops at Nysi, which are supplied from the Kilo mines, the ground falls sharply by a steep descent of four thousand feet. The horizon widens out before us, the mountains disappear, a mist rises from the gulf which is opening out at our feet: below us lies Lake Albert glittering in the brilliant light.

LAKE ALBERT.

Lake Albert, one of the smallest of the African lakes, has the appearance of an inland sea. Its length exceeds one hundred twenty-five miles and its average breadth is forty-seven miles; these figures can be appreciated if we compare them to the dimensions of the Lake of Geneva, which only measures forty-four miles in length and twenty-five in breadth. Lake Albert is the most northerly of the lakes forming a string along the great depression opened out in the rock formation of East Africa by the prehistoric cataclysm, and its soil preserves evident traces of this upheaval. Lakes Tanganyika, Albert and Victoria are the immense reservoirs from which that mighty river the Nile flows down like a thread to the Mediterranean.

When we are on the top of the cliff, from which the route, in a series of bold turnings, descends to the borders of the lake, we have the impression of having reached the edge forming the border of a country. And in reality it is the end of Belgian Congo, the end of our mother tongue, which we have not ceased to hear since our departure from Europe. On the horizon the English coast is outlined like a new country; we are separated from it by real straits which we must cross by steamer.

Before reaching Kasenyi, where we shall embark on the Samuel Baker, we are met by some happy news. Her Royal Highness the Duchess of Aosta and her son, the Duke of Apulia, who are now hunting in the Kivu district, are coming to meet us.

The Duchess of Aosta, the sister-in-law of the King of Italy, is a princess of the Royal House of France. She is passionately fond of Africa. The natives of Italian Somaliland have nicknamed her the "Bedouin Princess," of which title she is proud, as it reminds her of her long roving across the desert. Her son the Duke of Apulia has just been making a long stay in Belgian Congo, where he has been passing a strenuous and rough time in learning the cultivation of cotton, and oil palms, and in becoming acquainted with the gold-mining industry. He has the unaffected manners of the high-born.

Poirier, who is charmed with the scenery through which we are passing, has gone on a little ahead of us to take some views of the steep slopes descending to Kasenyi. In order to apprise us of his whereabouts, he has placed a piece of paper in a cleft stick and put it in a conspicuous place on our route. It bears the words: "Look out! Cinema!"

Suddenly we hear the sound of a motor. Poirier, who together with Specht has posted himself on a rock overhanging the road, sees a light car go at full speed, then suddenly stop. A very tall European, wearing the costume

of the safari, gets down and goes up to read the piece of paper with the above inscription. He looks round him with a laugh, sees nothing in sight, and without expressing any further curiosity, gets back into the car.

A few moments later we present our cinema artist to the tall European, the Duke of Apulia, who laughingly says to him:

"At least, you give warning!"

Her Royal Highness the Duchess of Aosta arrives shortly afterwards. Although her taste for nomadic life, all the rough inconveniences of which she readily accepts, as a rule makes her despise the automobile, this intrepid traveler does not regard our white caterpillars with any less interest and fellow feeling. The duchess stops in front of the little Tricolor streamer attached to the Golden Scarab, looks at the silk, torn by the desert winds, burnt by the sun of the Tchad district, and somewhat discolored by the equatorial rains, and says with a smile:

"It is thus that it is beautiful."

Beneath the portrait which Iacovleff rapidly sketches she adds two names to her signature—France, Savoy.

The duchess tells us of some of her travels and hunting expeditions.

She has a very clear recollection of the Niger, Oubanghi and Lake Albert, which she crossed for the first time eighteen years ago. There was no steamer in those days, and it was necessary to cross on one of the large sailing boats manned by primitive crews.

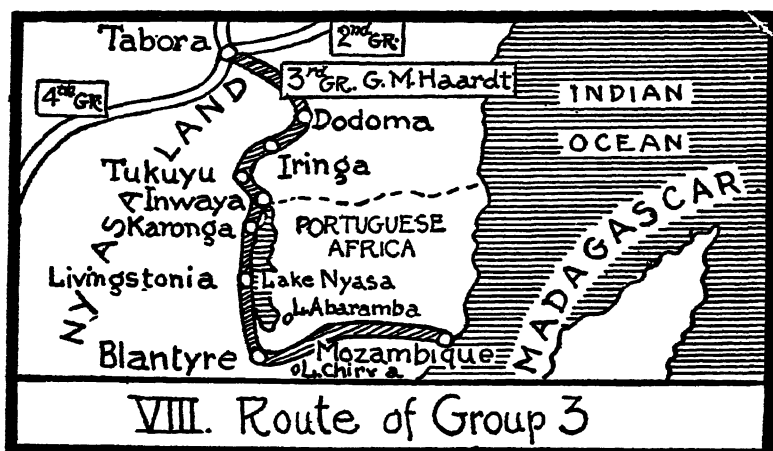
In recalling those past times the voice of the Wandering Princess seemed to be clouded over with regret. Can those who have tasted the rugged charm of primitive life with its unfettered liberty ever forget its fascination?

Toward the end of the day the duchess and her son leave us to return to their hunting camp in the open savanna, sixty miles away.

The Samuel Baker takes us the following night to the Anglo-Saxon shore. The little steamer is very comfortable, the attendants are smart, and the service is perfect; the barman makes excellent cocktails; we are entering the realm of progress.

The dining saloon of the Samuel Baker is encased in wire gauze. We dine there as if we were in a cage, protected from mosquitoes, but a little disconcerted by these elaborate precautions.

While each resounding revolution of the screw is taking us farther away from wild Africa, the fireflies come when it is dark, and, gluing themselves against the grille of our cage, seem to throw out distress signals for liberty.



AT Kampala the expedition divided into four groups of two caterpillars each with a view of studying the different approaches to the Indian Ocean in the direction of Madagascar.

Georges Marie Haardt, the head of the expedition, took personal charge of the third group.

Leaving Tabora and crossing the Tanganyika territory (formerly German East Africa), he went southwards by way of Dodoma, Iringa and Tukuyu (Langenburg) and after surmounting several difficulties, reached the shore of Lake Nyasa at Mwaya, which had never been attained before from the north.

Going along the marshy shores of the lake, often unable to find any track or native paths, the third group reached Livingstonia at the cost of very great efforts.

From Blantyre, opening out a way between Lakes Chirwa and Abaramba, the party crossed Portuguese Africa and on June 14, 1925, arrived at the port of Mozambique, which is the nearest point on the African coast to Madagascar.

Chapter VIII—To the Indian Ocean

BRITISH EAST AFRICA.

SHOULD we call it English Africa or England in Africa? The latter name would seem to be best suited to the new country we enter at Butiabwa.

Even before the Samuel Baker came alongside the wharf, the aroma of their light brown tobacco, Virginia or Navy-cut, is wafted to us, recalling olfactory memories of the cantonments of the English army in the villages of Artois.

It is this odor perhaps which gives most character to the surroundings. There is no doubt that on the quays of Butiabwa the atmosphere is English, and not African, despite the presence of numerous natives. The latter are very different from those we have just left on the Belgian border: these are clothed, whereas the former were nude.

The men wear a long white coat called a *can'zou*; the women are draped in cottons of large pattern and lively colors; their heads are covered with handkerchiefs of a silk and cotton mixture; it is not uncommon to see them with sunshades. All this variegated population slightly recalls the appearance of a scene in a negro play in some music hall. It partakes of a negro variety show.

With rare exceptions these natives understand only the Kiswahili language. They are not taught English, and the English colonists do not like hearing the natives speak the same language as themselves. This exclusiveness is one of the barriers in the Anglo-Saxon colonies separating Europeans from natives—barriers which, on the contrary, we try to break down in the French colonies.

The methods pursued by Latin colonization have always

been based on the intermingling and evolution of the autochthonous races. In this way the conquest of the Gauls gave birth to the Gallo-Roman epoch. The Anglo-Saxon method, on the contrary, seems to follow the principle of peopling the occupied country with the colonizing race, which ends in the elimination of the aborigines and the formation of "Dominions," real English countries which preserve in their purity the traditions and customs of the mother country. It is a system of expansion "by swarms." Moreover, is not England, in truth, a busy, humming hive, whose law is work, and whose ideal, production? It is a different ideal from our own, but still an ideal, which gives to that great empire the power of the famous lever which Archimedes demanded to lift the world.

At first sight British East Africa looks like a vast and prosperous commercial enterprise, the organization of which is seen from the moment of our landing in the nature of the custom-house formalities.

Are we again in contact with the institutions of old Europe? It seems to us a dreary road from Butiabwa to Masindi, where we find a hotel (the Interlaken Hotel), which, notwithstanding the charm of the bougainvilleas covering its walls, cannot efface from our minds the beautiful and wholesome nights we spent in the brush.

Next morning it is raining, a fine, tiresome, European rain. The sky is autumnal and of a uniform gray; our automobiles are covered with mud.

After catching a glimpse of the mountains and crossing some marshland, in which we notice the familiar outline of papyrus, we reach Hoïma, where lives Tito Winyi, king of Buganda, one of the most important native sovereigns in the part of Uganda we are now crossing.

We make the acquaintance of Tito Winyi on the occasion of an official five-o'clock tea. His Majesty is wearing a white suit of irreproachable cut, and, in accordance with

etiquette, is accompanied by a woman with her head shaven, draped in a violet toga like a Roman woman. She bears the title of "the king's sister."

Custom decrees that a monarch in Uganda must always have an interchangeable mother or sister. If one or both are dead, his ministers choose a successor from among the members of his family. As a matter of fact, the "sister" of Tito Winyl is only his cousin. She presents the appearance of a dowager who has been very well brought up, and her taciturnity is good augury of her being able to keep state secrets.

Next day by attending a session we are afforded the opportunity of completing our notes on the ceremonial observed at the Hoïma court of justice.

In front of the court the police regulate the entry of the crowd and see to the garaging of the automobiles and motor-cycles, of which there are a considerable number.

We enter a rectangular hall; the public are drawn up to right and left in perfect line. At the lower end is a platform on which is a scarlet and gold throne, and a few chairs for the dignitaries. A hanging is raised, a little Shakespearean dwarf announces the sitting of the court by striking the ground with his staff-of-office, and the judges make their entry amid general respect. They bow before the portraits of the English royal family. The session begins. Unfortunately it is without any special interest; Tito Winyl, who is feeling indisposed, retires, to be replaced by his deputy.

We betake ourselves to the clerk's office, for Iacovleff is anxious to have the dwarf apparitor for a model, on account of his characteristic appearance. Black bureaucrats move about in a free and easy manner among the green folios; they telephone and typewrite.

O Louhao, good judge on the banks of the Congo interpreting so agreeably the Code Napoléon, you would grow pale with jealousy at all this paraphernalia of progress!

But all this civilization is possibly not very deep; it would be abnormal if it were so. How in a few decades could the black race reach the development which it has required centuries of effort on the part of the white race to attain? The remarkable faculty for imitation possessed by the African races is deceptive, and imitation does not necessarily mean assimilation. Education, even evangelization, cannot change in a moment the inner nature of a man, and his moral evolution, like all other human problems, cannot be determined apart from the factor of time.

The White Fathers have a prosperous mission at Hoïma, which for long was one of the advanced outposts of this order and did valiant work at the time of the famous anti-slave-trade crusade. The fathers come to our bivouac; they have a long talk with us about their work, to which the English are today the first to render homage; one of them quotes the request made to a missionary one day by an old negro:

"For fifteen years I have been a Catholic, and don't you think you might let me have a little rest now?"

This reminds us of a story that was told one of us some time ago. Touched by grace, a native requested to be baptized. Now he had three wives. When the father explained to him that this situation was incompatible with the dignity of a Christian, he returned to his village thinking hard. A few days later he came back beaming with joy.

"You can baptize me now," he told the missionary, "for I have only one now; I have killed the two others."

This fact did not prevent the neophyte from being a man of good will, and the incident merely brings out this elementary truth: if centuries have intervened between the bark-woven loin-cloth and the long white coat, only a few years separate the natives of the forest from those we see at Hoïma.

Civilization cannot transform nature by a stroke of a

wand, any more than it can men. The country we have traversed in going from Kampala to Hoïma may well be studded with modern villages, but they still retain an exotic appearance, and a regrettable lack of esthetic harmony results therefrom.

The corrugated iron roofs of factories, and the *douka*, where the Hindus sell everything there is to sell, seem out of place and ugly in the midst of banana trees and cotton fields. All these buildings wear the appearance of the hastily put up cantonments of an army of occupation. Our eyes search in vain for some native hut inspired by the nature which surrounds it, and our memory sadly recalls the charming setting in which the Mangbetou dwell.

At Kampala, the capital of Uganda, another hotel awaits us—the Imperial.

This time we are no longer in any doubt: we are not in English Africa, but very much in England transplanted to Africa; and in this it resembles England in India, in the Transvaal and in Australia. It is a new country in which there is nothing new, wherein, on the contrary, everything is organized so that the European may feel at home, and wish to stay there. We recognize that this end is fully attained.

The Imperial Hotel has its baths, its douches, its dancing hall, and its bar with its black barman wearing a capital “B” woven in green on his *can’zou*—proving that his function belongs to his costume and not to the native himself.

The streets of Kampala are well maintained and are full of animation. It has naturally its “city” where business is transacted, and its cottages where people live.

Its public buildings are all there—its churches, its stock exchange, banks, shops, golf course, numerous tennis courts, and clubs. How should an Anglo-Saxon not find here employment for every minute between breakfast and whisky time?

But the natives? There certainly are natives, but in such a secondary position that they are lost in the crowd, with the exception of the superb *askari* who, standing at the cross-roads, fulfil with authority the functions of policemen.

In the evening, through the half-open windows, elegant interiors can be seen lighted by electric lamps with rose-colored shades. People smoking round bridge tables, a phonograph playing rag-time, dancing on the terraces, flirtations, and the scent of gardenias wafted through the night.

Past the gardens little timid lights are coming and going; these are the natives carrying lanterns in their hands, by order of the police.

THE MOMENT OF SEPARATION.

April 17, 1925.—Kampala.¹

Received the following telegram:

No. 122.—Accept with enthusiasm your new proposals and think the breaking up of expedition into four groups an excellent idea, worthily crowning the work accomplished by you and your collaborators.

ANDRÉ CITROËN.

The moment has now come to realize the program thought out in the clearing of the amaryllises—the linking up by automobile of the line of the great lakes we have just reached and the east coast of Africa to Madagascar.

And now comes the final rush, as we may well call it. This expression is perfectly accurate. We must attain our end at whatever cost. Henceforth everything will be subordinated to this necessity. Today we begin a chapter of real developments.²

¹These lines and the pages which follow, down to the end of this chapter, are taken from the diary of Georges Marie Haardt.

²Before dividing up the groups at Kampala a note was sent to each of them by the head of the expedition, defining the ends they were to pursue. The following were the chief items:

The final objective of the Citroën Central African Expedition is Mada-

A STUDY OF THE ITINERARIES.

To Mombasa.

Roads and tracks will enable us to go from Kampala to Nairobi, the capital of Kenya, passing by Jinja (sources of the White Nile). Between Nairobi and Mombasa, there is a railway, but the journey by automobile has never yet been attempted. Going by the plains of Massai we shall reach Kilimanjaro (19,710 feet high), the highest mountain in Africa. After that 250 miles of unexplored route to Tanga on the Indian Ocean.

To Dar-es-Salaam.

It will be necessary to cross Lake Victoria and go back to Tabora. There is a railway joining Tabora to Dar-es-Salaam, but between these two places there is again no automobile route. According to the information we have

gascar, the geographical position of which makes it a center of French colonial development in South Africa.

The mission of creating great intercolonial liaisons, which has been entrusted to it, and the study of the different ways of access to the ocean toward Madagascar from our territory in French East Africa, have very great importance.

In order to take advantage of the suppleness provided by our organization and to utilize to the utmost the combined resources of the expedition, it will divide into four groups, each of two automobiles, at Kampala. This division will permit of studying the ways of access to Madagascar by the ports of Mombasa, Dar-es-Salaam, Beira and the Cape of Good Hope.

M. Audouin-Dubreuil will direct Group I, which will consist of M. Poirier and the mechanics Trillat and Rabaud. Its objective will be Mombasa.

Commandant Bettembourg will direct Group II, which will consist of M. Bergonier and the mechanics Prud'homme and Piat. Its objective will be Dar-es-Salaam.

While keeping in my own hands the direction of all the groups, I shall take command of Group III, which will consist of MM. Iacovleff and Specht, and the mechanics Maurice Penaud, Maurice Billy and Balourdet. The objective of Group III will be Beira.

M. Brull will direct Group IV, which will consist of the mechanics Remillier, Fernand Billy and De Sudre. Its objective will be Capetown.

gathered, the routes traced formerly by the Germans have been abandoned. There are few rivers to cross.

To Beira.

The same route as far as Tabora. Thence descend by Dodoma and Tukuyu as far as Lake Nyasa. Skirt round the lake to Blantyre. According to our information it will be difficult going to Langenburg. There are numerous rivers to cross, without bridges or ferries, especially the Ruaha, the waters of which are high at this season of the year.

As regards crossing Nyasaland, great difficulties may render its realization impossible.

To the Cape.

From Tabora descend in the direction of Lake Tanganyika; cross the latter from Kigoma to Albertville and reach the region of Katanga, where it seems there are road possibilities.

Our information regarding the communications in Rhodesia is not reassuring, but farther to the south the situation gradually improves and becomes very good in Cape Colony.

In a word, the greatest difficulty in this itinerary consists in its length, 3,100 miles.

It is extremely interesting to note that the hinterland of the ports of the east coast of Africa is entirely served by railways, to the exclusion of any system of roads. The result of this is that the work of colonization is found grouped along the railways, and that in the interior vast wild stretches are to be found where the natives still live in their primitive fashion.

The condition of prosperity to which the English colonial domain of East Africa has attained does not compare well with such a complete lack of roads.

April 19—Departure of the two caterpillars of Group I.

I take leave of Audouin-Dubreuil, the companion of all my good and bad days in Africa; of Poirier, whose wonderful artistic sensibility has enabled me to realize more vividly the charm of Africa. Trillat and Rabaud complete this group; they are valiant mechanics, inseparable in my mind from all that we have accomplished, and the success we have obtained. Trillat, full of ingenuity and foresight, in addition to his duties as a mechanic has undertaken with great devotion, from the very beginning, the delicate functions of nurse and assistant-cook.

April 22—We are on Lake Victoria, the largest lake in the Dark Continent, a real inland sea. After a crossing lasting two days, the Usoga takes us from Entebbe to Mwanza. The Usoga is almost as large as a cross-channel steamer, but in spite of that Specht did not find its motion sufficiently steady.

April 25—We are rolling forward on the soil of Tanganyika Territory, formerly German East Africa, now under the English mandate. The German occupation has naturally left behind its military souvenirs, especially the barracks, flanked at the angles by large stone towers. The work performed by the former masters of the country is considerable, and everywhere we see traces of their remarkable faculty for organization, to which the English have added their sense of what is comfortable. The road is good to Tabora.

April 26—A railway—the first we have seen for six months—going from Dar-es-Salaam to Kigoma, linking the sea with Lake Tanganyika and a large district of Belgian Congo. Tabora is a large town still bearing the marks of its German occupation, but filled with many other memories. When it was still only a native village, Livingstone, Stanley and Cameron made long stays there. To the Belgians, Tabora represents a great victory. The successful raid made

by General Tombeur, who took it in 1917, forms one of the finest feats of arms in the history of colonial warfare.

TABORA TO MOZAMBIQUE.

April 27-28—We visit the house which Stanley occupied at Twahari, near Tabora. It is now nothing more than a ruin amid the exotic vegetation. A hundred yards away is the tomb of Snow, Stanley's companion, who died suddenly in 1871. On the tomb is a Cross, a name, a date, and these three words: "Stanley-Livingstone Expedition." The discovery of East Africa in epitome.

April 29—Departure for Dar-es-Salaam of Commandant Bettembourg, my devoted colleague, whose qualities as a colonist and whose "go" have been so valuable to me since the commencement of the expedition. His group consists of Bergonier, whose light-heartedness has never failed despite his numerous adventures; Prud'homme, the youngest of the mechanics, who, notwithstanding his youth combines mechanical knowledge with the humor of an old campaigner; and Piat, calm, reliable and always happy.

The itinerary of Commandant Bettembourg has been changed. He will go by way of Sekenke and Kondoa Irangi, using the track between Tabora and Dodoma.

As this track will have thus been reconnoitered by Group II, I shall be able to take my party by railway to Dodoma in order to spare our petrol.

Brull, the scientist, departs on his long journey to Cape-town. He is accompanied by Fernand Billy, firmly seated with his eternal pipe in his mouth; and Remillier, a good technician, who always gives ready and valuable aid to his comrades.

After eight months of living together all the time, the break-up of the expedition is complete.

April 30—We leave by train for Dodoma at midday. The engine burns wood as fuel.

Our two caterpillars are each placed on a truck and covered over with old tarpaulins. A wagon loaded with tins of petrol separates them from the one we are occupying.

Here we are sitting on cases round a folding table. The indefatigable Iacovleff has his pencil in hand despite the shaking of the train; Specht, whose good-humored smile is unchangeable, watches him at work. Maurice Penaud, who has left the Silver Crescent to reinforce our group, Penaud in whom I do not know which to admire the most, his good sense, his intelligence, or his courage, is talking to Maurice Billy, his faithful ally, full of energy, a good fellow and very sporting, who ardently applies himself to the solution of difficulties of every kind. Maurice Billy has been my inseparable mechanic in all our expeditions. He drove the first Golden Scarab at the time of my crossing the Sahara. Near them sits Balourdet, who has arrived from Dar-es-Salaam to join us at Tabora.

Iacovleff now assumes another rôle; he is to preside over our kitchen, and serenely the artist takes on his new duties. A man of method, with the soul of a nomad, and never put out of countenance except with the commonplace and vulgar, he makes a charming companion during the sometimes difficult moments of our long expedition.

The day is drawing to a close. We are rolling through absolutely wild brush.

The locomotive is panting up an incline and sending up sparks to the sky which form dangerous falling stars.

At the first halt we station a boy with a pail of water near each of our cars, for the tarpaulins are old, and dry as tinder.

Night falls. We experience the joy of a dining-car. After eight months of the brush we have almost forgotten this manner of dining. The glare of the lamps gives a strange effect to the khaki-clad figures, with their bronzed



faces, their bare legs, and their hands holding long hunting knives busy over tins of preserved meat. The picture is not wanting in color.

Suddenly we scent a smell of fire. We open the door of the dining-car; the train is enveloped in smoke and flames. Our caterpillars are on fire and there is still some petrol in the reservoirs!

We shout and whistle, but our voices are lost in the rumbling of the train. At last it occurs to me to fire my Colt revolver; the engineer will be sure to hear the report.

The train stops suddenly. We rush out. The Golden Scarab is in flames and the stored petrol is in the next wagon.

Penaud, Billy, Iacovleff and Specht hurl themselves onto the truck and try to tear off the lighted tarpaulin. Everything that is not of metal is burning—seats, hood, and packages piled upon the car and tractor. The spare rubber tires are alight, sending out flames as from torches, and a black suffocating smoke.

Every second I expect to hear an explosion. There is no water to be had. Pails are filled with sand. The smoke lessens.

In a few minutes the fire has been mastered. We have come off without any accident, except for burns. But the Golden Scarab is nothing more than a blackened skeleton. Maurice Billy examines the magneto, replaces fresh wires, establishes the contact, and we hear once more the familiar sound of the engine. Never has it afforded us such profound joy.

The train starts again.

I get down at a stopping place to telegraph a list of appliances and material to be sent up from Tabora, where, happily, we still have some spares. The black man at the post-office transmits the message by telephone, letter by letter, making use of a kind of phonic Morse Code in which

the dots are represented by the syllable "pa," and the dashes by "ra." This produces an irresistibly comic "parapapa" and "rarapapa."

May 1-2—Dodoma. Curious native types in the market at Dodoma: the M'gogo, of hostile appearance, slightly recalling the Moors of the Sahara. Chestnut-colored skins, smooth hair plaited in a point or round the head. The men have their ears pierced and distended in such a manner that they can fix in them enormous pieces of wood like corks by way of ornament. Their bodies are effeminate-looking, but they have faces like brigands; they were formerly caravan robbers of whom Stanley speaks in his memoirs unsparingly.

*May 3—*After working two days on the Golden Scarab it rises again from its ashes. Maurice Penaud, Maurice Billy and Balourdet have overhauled all the mechanical portions, and Iacovleff and Specht have repainted the body. Iacovleff has even discovered some Hindu workmen who have been able to repair the cane seats.

Midday. We start off for our first objective—Lake Nyasa, which we hope to reach at Mwaya, by way of Iringa and Langenburg.

*May 4—*Track very bad; sandy and marshy depressions.

At 4 P.M. A deep river, more than three hundred feet wide, the current of which is over twelve miles an hour, bars the way. This is the famous Ruaha, the first unfordable obstacle we have met since leaving Kampala.

It is impossible to construct a bridge. There are two small canoes on the opposite bank; there is a third one on our side in bad condition.

We fire shots and whistle to attract the attention of natives who at last appear very cautiously out of the rich vegetation on the opposite bank. Two of them cross over. We discuss the situation with them. Their willingness to help is not as spontaneous as in Belgian Congo. But we end in coming to an understanding; business is business.

Tomorrow morning thirty men will come and help us to build a ferry on which to cross.

We examine the possibilities: the canoes do not seem capable of bearing the weight of our cars. We cut down some trees and endeavor to construct a raft, but the trunks are so heavy that they sink to the bottom.

We go back to the canoes. With the aid of pieces of wood, empty petrol tins and some clay, we make the canoes fairly water-tight.

In the evening I unfold my maps near our bivouac fire. I make a lengthy examination of those in which the routes given approach or cross the one I wish to take—Livingstone's and Burton's itineraries, and that of Lieutenant Victor Giraud. On a map traced by Giraud I follow the course taken by him which passed by the spot where we are about to cross the Ruaha. And we call to mind the vicissitudes in the journeys of that youthful explorer of twenty-four, who lost his life in his heroic efforts a few years later.

The death of Livingstone, in the marshes bordering Lake Bangweolo, left an entire region, situated in the center of Africa to the northwest of Lake Nyasa, only imperfectly known. This blank spot remaining on the map of the Dark Continent excited the curiosity of Lieutenant Giraud, and determined him to take up the exploration at the point where Livingstone had left it. Leaving Zanzibar in 1882, he returned to Quilimane, on the coast of the Indian Ocean, in November, 1884; he thus spent two years in accomplishing his object. From the geographical point of view he confirmed the existence of the two lakes, Bangweolo and Moero.

May 5—The ferry is constructed; but the mere weight of the platform, made out of the trunks of trees, lowers the poor little canoes in the water to an alarming extent. When the first caterpillar, emptied of all its contents, is placed upon it, the water rises to the top of the sides. The least movement would have dire results. A line will guide the

ferry, thus avoiding any sudden jerks by the poles or paddles.

A start is made in impressive silence. Even Maurice Penaud says not a word. The only sound is the lapping of the swift current. Four minutes pass by. The ferry gets alongside the opposite bank, which is high and very uneven. The Golden Scarab plunges forward to the attack, its caterpillars grip, but only just in time, for the canoes lose their balance under the strain, take in water and begin to sink.

The landing of the second car is still more nerve-racking, for this time the canoes sink before the landing is entirely effected, and the car remains caught on the bottom of the sloping bank, with the rear part in the water, and slipping desperately. Had it not been for the rapid intervention of the first car, which hauled it up with a cable, a catastrophe would have been inevitable. After the fire, then comes water.

May 6—We progress in the direction of Iringa in the midst of magnificent scenery by a route interspersed with ravines at a height of five thousand feet. In this country besprinkled with flowers and baobab trees and also with difficulties, the inclines sometimes mark 20 in 100. The population is exclusively pastoral.

At five o'clock we reach Iringa, an agglomeration of buildings right in the mountains. The reddish color of the houses, the Arab-looking costume of the natives and the intense brilliancy of the rarefied air, remind us of a *ksar* (fortress) in the Sahara.

May 9—A full moon is shining with its pale light on our camp pitched some twelve miles beyond Malangali. It is three o'clock in the morning; all lie sleeping under their little white mosquito-nets.

Two hyenas are roaming and mocking round our bivouac. The boys stoke up their fires twenty yards from our beds.

The howling comes nearer and takes on a threatening note. I get up and select from my weapons, always close to my hand at night, a shotgun loaded with buckshot; Maurice Billy, who has also been awakened, at once joins me.

In the light of the moon the outlines of the two huge hyenas are seen facing us, less than three hundred feet distant. I go nearer and fire at about a hundred feet. One of them is wounded and goes off howling, the other snorting loudly.

The camp wakes up without taking much notice. I get back into my blankets, and very quickly we all resume our interrupted slumber by the protecting light of the bivouac fires and of our headlights.

May 10—Still another branch of the Ruaha to cross, then the Kimalo; yet a third river unforeseen in the direction of Brandt, no less than four feet in depth; its banks are steep.

The cars having been lightened by removing their magnetos, they slide down the slope, and helped on by their weight of three tons, advance into the water in which they sink like a stone, passing over the deepest part in a wreath of foam. It is a new kind of water-chute copied from the scenic-railway. When they come to the end of their impetus they stop dead; the bonnet is sufficiently out of the water to put back the magneto and start the engine. Then each car, like an amphibian monster of prehistoric times, gropes after the opposite bank, and all dripping, climbs it with groans.

The operation has lasted an hour.

We are approaching the high tableland on which Langenburg is situated; in the far distance it appears to be covered over by thick, dark clouds which are being blown about by sharp gusts of wind. As we get near we have the impression of gliding under a canvas covering of cold cloud.

In a glacial wind we climb the slopes, which reach 15 in

100. The ground, soaked by the rain, is so slippery that sometimes the cars slide about like toboggans, although all the brakes are full on.

We overtake three Englishmen who, accompanied by a crowd of native porters, are making their way to the auriferous region to the northwest of Langenburg. They are of the type of Klondike gold-seekers as represented in American films; one, a small lean-looking man with a gray mustache completely concealing his mouth, another a lanky and dried-up Don Quixote, and the third, quite in keeping with the others, with deep-sunk steel-blue eyes and rather shapeless red cheeks.

May 11—At Igale, where it rains eight months in the year, we are not astonished to arrive in a driving rain.

The administrative officer points out to me in a kindly manner that it is useless for us to attempt to go on to Langenburg, and that it would be better to take at once the track going from Fife to Fort Hill, in order to reach Stevenson Road, which links Lake Tanganyika with Lake Nyasa.

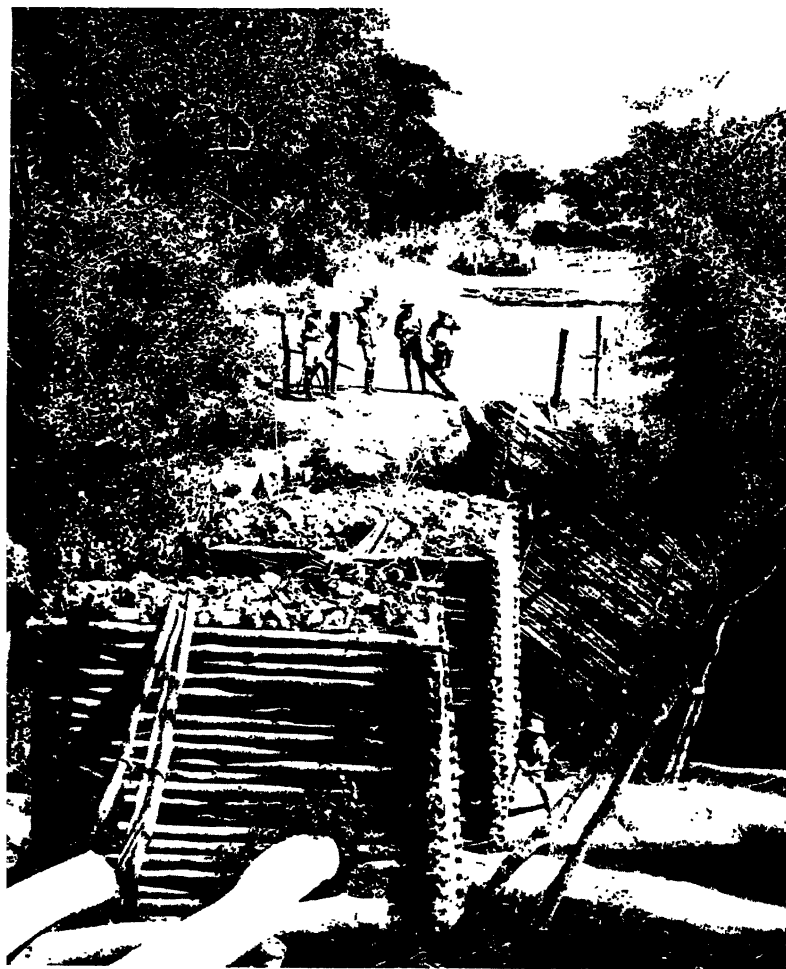
That would seem to be a detour of over three hundred miles. Our reserves of petrol would be insufficient, and so, cost what it may, we must reach the inaccessible Karonga by way of Langenburg.

It is about twenty-eight miles from Igale to Langenburg.

We start off at 2 P.M.

It has not ceased raining. At a height of eight thousand feet we experience the painful sensation of being imprisoned in the mountains. There are very steep declivities. The road is greasy and intersected by mountain streams throughout a distance of four to five miles, bordered by precipices. After that the track goes up and down through valleys.

There are bridges, but they are either half in ruins or wholly so. In the first case, we make use of the half that still remains, in the second, we make a new bridge out of the débris of the old.



A partially ruined bridge

In the evening we cross one of the most dangerous bridges. One hundred feet beneath it, we can hear a rapid torrent, invisible in the failing light. We are hardly on it before it gives sinister cracks, and it goes down with a crash just after our second car has passed over it.

Night comes down melancholy in the lone mountains. It is like a journey in parts of Switzerland where there are no roads. Incessant rain. We are all very tired.

At 7 P.M. we are still twelve miles from Langenburg. We cannot bivouac in this deluge and for the moment no shelter is in sight. We are perishing with cold; our clothes are sticking to our skin.

8 P.M.—A light in the distance on a height. We mount up to it. It is a rest-house from which there is a road going to Langenburg. It is not more than a mere roof, but this evening we can appreciate the comfort of even a modest shelter.

A man is camping under it. Yet another gold-seeker.

Old MacDonald can hardly believe his eyes; headlights, the noise of a motor, and six Frenchmen coming to sit round his fire!

A Scotchman, he has not been back to his country for thirty years. For ten years he has not seen an electric light; and so our headlights fascinate him. A road-maker by profession, it is not surprising that he has had to abandon his calling in a country such as this. Like so many others, he has followed the golden thread.

With infinite care he brings out of his box an ingot of the precious metal—the result of one whole year's toil. Tomorrow he will send it from Langenburg to the Standard Bank, and in a few months' time they will pay him its value, after it has been analyzed.

In honor of this brave man, who has brought us an agreeable termination to a very hard day, we open a bottle of champagne. Old MacDonald is completely won over. To-

morrow at Langenburg he will relate this marvelous meeting.

May 12—We are at Langenburg, at an altitude of more than 6,500 feet, under rain and mist which affects even the character of the inhabitants. The senior commissioner is charming, but pessimistic. He doubts whether we can possibly reach Mwaya on the shores of Lake Nyasa, as the route for the greater portion of the way must be inundated. As to reaching Karonga by way of Mwaya, there are no roads nor tracks. We must therefore follow the borders of the lake, which should be sandy.

In the afternoon, when everything seems settled, I make a tour of Langenburg with Iacovleff. It is still raining, but this does not prevent the natives from walking about nearly nude; nevertheless, they partially conceal their nakedness under large banana leaves. There are flowers in profusion, fruits of every kind, and strawberries. A few white colonists are taking to agriculture in this promising country.

It would seem that when the weather is fine—that is to say a maximum of sixty days throughout the whole of the year—a magnificent view can be obtained as far as Lake Nyasa.

May 14—At 8 A. M. we leave Langenburg, the capital of the Kingdom of Rain, and for six miles we are accompanied by its prime minister, Mist.

But we are descending rapidly to more clement regions where the mist ceases to follow us. In front of us lies the horizon and above it is a streak of emerald.

For nearly a week we have not seen the sun. This afternoon it is darting its rays on the glittering surface of Lake Nyasa extending beneath us.

We reach Mwaya without too many difficulties, but not without emotion.

The information gathered by General Swinton from the British Central Africa Corporation, and sent to the Expedition, is very unfavorable.

Major Pellat's opinion is: ". . . An ordinary vehicle will often sink completely in the mud, the depth of which in certain places is so great that a car might entirely disappear in it."

A letter from Colonel Ponsonby says: ". . . We are especially anxious to assist your friends by every means in our power. We think that the best way of doing this is to be perfectly frank and not encourage them to undertake an expedition which would not only be very risky, but might easily lead to the loss of human life. Further, and this is just as important to your friends, the result might be a complete fiasco instead of the success which such an effort deserves. . . . Every question of travel in this country is very much influenced by the rainy season. If the river is dry and the water low, it is naturally quite possible for an expedition such as yours to descend and climb the banks in most places, but in the rainy season the passage is quite impossible.

"My remarks refer to the route from Karonga to Down, on the southwest shore of Lake Nyasa."

So now begins the portion of our journey which has been deemed impracticable.

The shores of the lake appear to us like the desolate sands of the desert. A short examination quickly shows us that it will not be possible to go along the edge as I had hoped. True, there is much sand, but in places a luxuriant growth of bamboos seems to forbid any idea of passing through them.

Shall we have to return to Igale in order to take the track from Fife to Fort Hill?

We are in rather low spirits as we sit down at our table before an old "koko" (chicken), our principal dish for lunch.

Suddenly we hear strange singing. A procession of men unexpectedly emerges from the reeds. A ruddy brown

European, thick-set and strong-looking, with his hands and knees bound with bandages, is coming toward us followed by fifty blacks in Indian file laden with innumerable packages, canvas tents, and even a large zinc bath.

It is Mr. Casey, sent specially by our friends at the Central Africa Corporation to study the possibilities of travel from Karonga to the south of Lake Nyasa.

This Irishman of fifty years, of smiling face and keen eye, is to keep us company right down to Mozambique. Of bohemian character, stout heart, and lively intelligence, he proved a most dependable and devoted friend throughout our numberless difficulties.

We hail him with joy as a messenger of good news.

A few minutes suffice to let me know that Casey, from whom I was expecting precise information on the possibilities of going from Mwaya to Karonga and beyond, only brings with him in reality his sterling temperament, his goodwill, and his great experience with the natives. He has been in the country for twenty-five years, during the greater part of which he has lived in the southern portion of Nyasaland in contact with the Mozambique Portuguese.

During the war he was an intelligence officer, which shows his great skill in negotiation with the natives.

But before meeting us he has not taken into account the requirements of a journey like ours; and so we must now organize, with the aid of any information I can extract from our new friend, the plan of our stages across Nyasaland, beginning with that of tomorrow.

May 15—It rains again during the night. Iacovleff's tent has collapsed over him; and he is suddenly awakened by the fall of a considerable quantity of water on his head. He takes refuge in Casey's tent.

At daybreak I search in vain for one of my boots. Iacovleff shamefacedly brings it back to me; when transferring his quarters during the night he took it to serve as a pillow.

We interrogate the chief of the village of Mwaya. His name is Moussa, and he appears to be intelligent. He acts as our guide through banana and palm groves, in luxuriant vegetation, as far as the Kiwira, which we reach at 10:30 A. M.

This river is three hundred feet across, and there is no sort of ferry. We effect the passage by constructing a pontoon with canoes.

We have a pleasant lunch in the center of the village of Roma. We are surrounded by the natives, and the scene is gay and animated. All at once we hear shouts, and Moussa brings us a well-built young black who has stolen a hunting knife and some bullets from one of our cars.

Casey requests that I shall pass judgment on the case; by that he means that I should indicate what penalty the thief must suffer, for one must not show too much generosity or else the natives would at once interpret it as a sign of weakness. I can choose between imprisonment and the rod. Since punishment is absolutely necessary, however slight may be the offense, if we would not imperil the safety of our future stages and have our cars pillaged, I leave it to the delinquent to make the choice himself. He prefers the rod and his liberty.

Without drawing any conclusions from his choice I nevertheless mention it for the benefit of the fanatical adversaries of corporal punishment.

In sight of the whole village assembled around him, five strokes of the rod are to be applied to his bare back as he lies flat on his stomach. The executioner is the *askari* who has been attached to us since leaving Langenburg.

This black soldier is very thin, tall and athletic-looking. He might be a figure taken out of one of Mantegna's pictures. He smilingly whisks round his rod with a whistling sound, in an attitude recalling the classical executioner in paintings of the Italian Renaissance.

After the first two blows Casey stops the *askari* with the gesture of a St. Nicholas. He points out to him with paternal severity that the rod ought to be applied flat and not with a scooping motion, which is unnecessarily cruel. The punishment proceeds. The black man is a stoic and does not flinch; after the fifth blow he lowers his *can'zou*, gets up, and disappears amid the laughter and jeers of the natives of the village.

At 6:30 P. M. after a day spent by the mechanics in uninterrupted labor, the pontoon bridge is finished—four large canoes bound together by a substantial platform. It is splendid. Maurice and Balourdet are very proud of it; they baptize it the "Paris."

Rain starts again like a cataract. We dine under a tarpaulin with our feet in water.

As our beds are submerged up to the mattress we decide to sleep in our cars, on our respective seats. Nevertheless the most impermeable coverings let in the rain here and there. We resign ourselves to wait for the morning, meanwhile protecting ourselves as well as we can against rain such as we have not yet encountered throughout our expedition, and against the horrible attacks of mosquitoes and ants.

May 17—We reach the Songwe at midday, after twelve miles of incessant struggling across swamps, mud, and grassy plains. Often the water reaches a new level, coming up as high as the magneto. It is only thanks to an intelligent guide that we are able to get through at all. This colossus, with his optimistic smile, takes us zigzagging across the plain, choosing the higher pieces of ground.

The Songwe is infested with crocodiles. At the request of a village chief I kill several of them.

Moussa gets a thorn into his foot; Iacovleff extracts it.

"On this occasion," remarks our artist, "I was able to admire the quality of the skin on the sole of a negro's foot.

It is as transparent as amber, resistant, exceedingly supple—in fact, very fine material!"

May 18—Lakoporo.—Our cars are going on the sand by the lake. At times like prehistoric monsters, with the water up to the bonnet and covering the caterpillars, they slowly cross the broad arms coming out of Lake Nyasa.

We cross the river Rufira on our pontoon, the Paris, which has come round by the lake.

Then, after excruciating going through the marsh grass, to our great surprise we again find a track. We have been proceeding without any track whatever for the last four days.

This evening we camp under the shelter of the huts of a chief. Everyone can now attend to his *crocos* (excoriations or bites), which are very difficult to heal, especially during the rainy season.

May 19—We reach Karonga at 10 A. M.

We have traversed fifty-five miles of brush and marshland since leaving Mwaya, instead of the forty by the straight line we had anticipated. We have had to make our way by the aid of ax, shovel and chopper, at a very moderate pace—only nine miles a day.

Officials and English colonists are astounded at our arrival and greet us with the greatest courtesy. We are the first to cross this difficult region. We receive contradictory information on the state of the track from Karonga to Livingstonia and beyond, in the direction of Blantyre. Nevertheless, everyone agrees that we have accomplished the most difficult portion and that from now onward we shall find tracks everywhere. The facts, alas, are to belie this friendly optimism.

A telegram from Bettembourg, who reached the Indian Ocean on *May 13*.

Another telegram sent some time ago from Audouin-Dubreuil. He has crossed Mount Meru and is going round

Kilimanjaro to descend to the sea by the valley of the Pangani River.

May 21—Our alarm clock has become no longer necessary since our good Casey has joined the expedition and placed his bed by the side of ours. Every morning at about four o'clock he starts a gurgling noise in his throat as if he had swallowed a fish-bone.

We leave at 5:30 A. M. Yesterday the going was easy; today the broken track is full of holes; there are rivers and marshland against which we have to battle unceasingly.

May 22—Rain again. Marshy crossings, where we endeavor to find our way in the more solid places, bending down the thick grass which forms an elastic and impeding obstacle to progress.

It takes us four hours to advance little more than a half-mile.

At last we reach the foot of the hill separating us from Florence Bay, where we arrive at 3 P. M. after negotiating numerous difficult places.

May 23—Departure for Livingstonia. Splendid mountainous route with hair-pin turns. In a distance of ten miles we pass from fifteen hundred feet to four thousand in altitude.

Lake Nyasa, shimmering in the sun, spreads beneath us like a map. In early morning mist, light shadows pass over the water out of which arise strange smokelike clouds, fantastic and well defined in shape. These are *kounga*, myriads of tiny flies which during the rainy season hatch out in the morning, fly about, make love, lay eggs, and then die with the daylight, forming a gelatinous mass on the water, which the natives gather, dry, and eat.

Livingstonia.—Free Church of Scotland, a mission under the care of the venerable Dr. Law, who is over eighty-five years old. Dr. Law was the first white man to enter Nyasaland after Livingstone, whom he knew.



Lake Nyasa



On the banks of Lake Nyasa

Scotch hospitality. A salutary rest, which is much needed by Specht, who is down with a bad attack of malaria.

May 28—For the last two days the two Maurices and Balourdet, who have become first-rate pontoon builders, have been working unceasingly, assisted by a few blacks, at the construction of a ferry made of logs bound together by twisted creepers, for the purpose of enabling us to cross the Rukuru with our cars. The very swift current, its great depth, and the numerous trees torn up by the flood render this river impracticable for canoes.

May 29—Once more we are confronted by another river, the Bua, and there is only a tiny ferry on which to cross.

The resident official at Kisungu, judging our idea of crossing with such precarious means to be mad, suggests our going for a week's lion hunting, during which time the natives may possibly succeed in ferrying over our two caterpillars.

But we do not give up the attempt; and an hour afterwards the first car is on the little ferry-boat, and the operation has begun.

We launch the Golden Scarab like a naval unit; but it is not well balanced; the rear part sinks down notwithstanding the natives who try to support it by standing in the water up to their shoulders. The natives redouble their efforts at our urgent shouts. Maurice Billy, with extraordinary foresight, has left his engine running, and moves forward his car half a yard; this restores the balance and enables us to sink fifteen yards from the bank in a depth of three feet of water.

The deepest place has been got over, but we are still two hundred feet from the farther bank.

It is 10 A. M.; the preparations we have to make for getting the rest of the way are more complicated than I had thought, and Maurice and I remain prisoners on the car, under the rays of a scorching sun, until 4 P. M.

The passage of the second car is more rapid, for the first one easily hauls it out of the water. At 6 P. M. the crossing of the Bua is accomplished.

May 30—At last we get a telegram from Audouin-Dubreuil, who arrived at Mombasa on May 16, after touching the Indian Ocean at Tanga on the 13th.

May 31-June 1—The delightful feeling of the tourist. A cordial reception everywhere. Breakfast, tea, charming little houses. To pass without any transition from primitive conditions of life to Anglo-Saxon refinements is a bewildering sensation. We seem to make a bound of twenty centuries in one hour.

June 2: Blantyre.—The commercial capital of Nyasaland. A warm-hearted reception. Bets have been laid against our succeeding, and here we are! We cause several people to lose their money! We meet Major Pellat of the Central Africa Corporation.

Our arrival at Blantyre definitely opens up a problem over which I have pondered since my first conversation with Casey at Mwaya.

As a matter of fact, Casey at once told me that in his opinion, contrary to the information we had received hitherto, it would be possible to reach the Indian Ocean at Mozambique. This Portuguese port has always seemed to me the ideal spot, as being the nearest point to Madagascar.

On the other hand, no railway goes to Mozambique, whereas between Blantyre and Beira there is a regular railway system. It would therefore be more valuable to explore the possibilities of making a connection by automobile with Mozambique.

I definitely decide in favor of the latter course.

I make a study of possible itineraries and the choice of a passage between Lakes Abaramba and Chirva through the marshland, which is usually dry at this season of the year.

June 4—A good route enables us to reach Zomba, the

capital of Nyasaland, where the expedition pays a visit to the governor, Sir Charles Bowring.

That same evening we camp by the beginning of the Chikala track, fourteen miles from Zomba.

During the war this track was used for bringing in supplies to Nyasaland from the Portuguese ports. It passes over the marsh (*dambo*) which extends for twelve and a half miles and separates Lakes Chirwa and Abaramba. No one knows whether it has since been abandoned.

"It is a case of heads or tails," says Maurice Penaud.

June 6—In front of us stretches the *dambo*, an immense and mysterious plain. The grass is very high. There are traces of buffalo, rhino and hippo.

We go slowly on soft ground, into which the cars suddenly sink in marshy holes.

The sinister warning contained in General Swinton's letter, which we received before starting out, comes back to my mind. Is it prudent to venture any further at the risk of being imprisoned in this moving ground?

There is a native path going up toward the higher ground; it ought to go round the *dambo* by the left. With Casey and Penaud we go on foot and explore in this direction. After a trying walk of over two miles we find a little village. I urge Casey to gather information.

He sets to work, offers the natives snuff and talks to them on entirely indifferent subjects. I grow impatient and remark that it is urgent to come to a decision if we do not wish to pass the night in the midst of the mud and mosquitoes. To which the excellent Casey replies:

"I am just finding my way round."

This is to explain to me that in conversations with the blacks of Portuguese Nyasaland the straight line is certainly not the shortest. This parley discloses that the path is everywhere intersected by marshes.

With our feet in mud and water and our heads exposed

to a leaden sun, we make a laborious return to the cars at midday and proceed.

The ground seems a little more stable to the right. We decide to try it. It is a good move; after sinking a few times the ground rises and becomes more and more stable; soon after, we see the smoke of a brush fire, an indication of a dry zone.

It is the end of the *dambo*. We go on full of optimism.

But our joy is of short duration, for we see with anxiety that the fire rapidly is advancing toward us.

It is useless to take flight. The flames would soon catch us upon this spongy soil.

It is impossible to turn the flank of this advancing wave. the front of which extends to more than a half-mile.

Nevertheless, though the tall grass is dry, the soil is still moist, and under these conditions there are grounds for thinking that we and our belongings have some chance of escaping the danger. The flames advance with a crackling sound, followed by a wall of absolutely opaque yellow smoke.

The only maneuver we can attempt is try to pass through at full speed. Maurice Billy accelerates. The Golden Scarab darts forward. We see nothing more, our eyes smart, we have to close them and hold our breath, counting the seconds.

Suddenly there is a shock. The car stands stock still. I open my eyes. The smoke is very much less dense; a gust of wind is driving it away. We are on the top of a heap of small branches of a tree which has almost burned out.

The second car looms up on our left, having prudently avoided following on our traces so as not to have a collision with us.

But the caterpillars of the Golden Scarab are beginning to catch fire. One of them has nearly come off. A front tube has burst.

The two Maurices, who are nearly asphyxiated by the smoke, burn their hands in putting the caterpillar right, while the tractor is swiftly unhooked.

At last the Golden Scarab starts off with a bound.

We are safe and sound.

This brush fire has nevertheless had one advantage: it has cleaned up the ground and we can again discover our famous track.

We pass through stages of hope and disillusion. Every two hundred yards we sink down into the ground; our progress is very difficult. We are getting weary and discouraged.

At nightfall we are approaching a wooded hill at the foot of which a village is seen. With Iacovleff we go forward on foot to get help. The footsteps of elephants and hippos imprinted in the soil cause us again and again to stumble.

After a tramp of three-quarters of an hour no village is to be seen. The night is very dark. Profound silence. We retrace our steps. Soon the glare of our headlights guides us back to the cars lying sunk in the mud.

A last effort of will-power on the part of us all is called for and we stir up black mud, called "black cotton." Alas! we soon see the stars reflected in the black water in front of us. We must stop in spite of everything.

After having drunk some champagne, as is our custom at the end of difficult days, we camp a little in rear of our cars amid the rank smell of the marshes and the clouds of mosquitoes; we fall into a heavy sleep despite the mocking jeers of hyenas.

Our advance has amounted to about three miles for the day.

June 8—Forestland intersected by marshy depressions.

We meet with the same difficulties as on the preceding days. When will they end? In five days, barely forty-five

miles have been covered. There still remain four hundred miles before reaching Mozambique.

Suddenly, the bad track we are following gives place to a road in process of being made. Natives are working at breaking it up. Casey obtains more encouraging answers. There is a great ravine to cross, but ten miles from here we shall find a Hindu who will get us help.

We reach the dwelling of this man before nightfall; he appears to be a power in the district. His face is lean, his eyes are like those of a bird of prey, his bearing is insolent, and he answers in monosyllables in bad English. He is a fugitive from justice who has escaped from Nyasaland and is thoroughly well posted concerning both borders. He states that the ravine cannot be crossed. The sides are precipices eighty feet in height, the tracks are under water towards Malakotera, which is still nearly forty miles away.

He will not procure us any workmen for such an impossible attempt.

In his quiet voice Casey tells him that we have come from Algeria in our cars and that after having crossed Africa and surmounted every obstacle we are certainly not going to be stopped by this ravine.

The Hindu seems to experience a certain amount of astonishment on learning whence we have come. I add that with or without his assistance the ravine will be crossed by noon tomorrow.

The man then promises a supply of natives and the necessary appliances by seven o'clock the next morning.

Our camping ground is splendid tonight; at our feet the ravine opens like a vast amphitheater, on which falls the soothing effect of moonlight.

June 10—Nature is becoming less hostile and the natives more trustworthy. The passage of the broad river Lourio, on an improvised ferry, puts an end to the innumerable difficulties of our journey.

At Malema, the first station in the Portuguese colony of Mozambique, messages from all sides are handed to me. One, especially, is of a kind to make me rejoice. It informs me that at the request of Monsieur Citroën the Messageries Maritimes have consented to divert one of their liners, the *Maréchal Galliéni*, to convey us from Mozambique to Majunga.

The tracks of our caterpillars across the African Continent are thus to be continued as far as Madagascar by the wake of a French boat.

June 11-12-13—We swiftly pass through an enchanting country: the dried-up marshes have turned into green prairies, the mountains are of purple granite and rose-colored sandstone; we cross the beds of rivers on bamboo bridges, the elasticity of which, at first somewhat disturbing, soon turns out to be a welcome diversion in this uneventful part of the journey.

An army of blacks straightens out all difficulties in our path. The Portuguese welcome us open-heartedly, and with glad faces salute the little French flags floating on our car. In this land of sunshine we again find that happy exuberance of spirits which doubtless does not go with the rain.

At a distance of thirty miles from the coast I receive a message from the French Consul at Mozambique informing me that he will come to meet us, accompanied by Prince Louis de Bourbon-Parme, the Governor of Mozambique.

June 14—A fresh wind brings us fresh scents; the ground is covered with fine sea-sand, and long lines of coconut trees gently sway their plumes which rustle in the breeze.

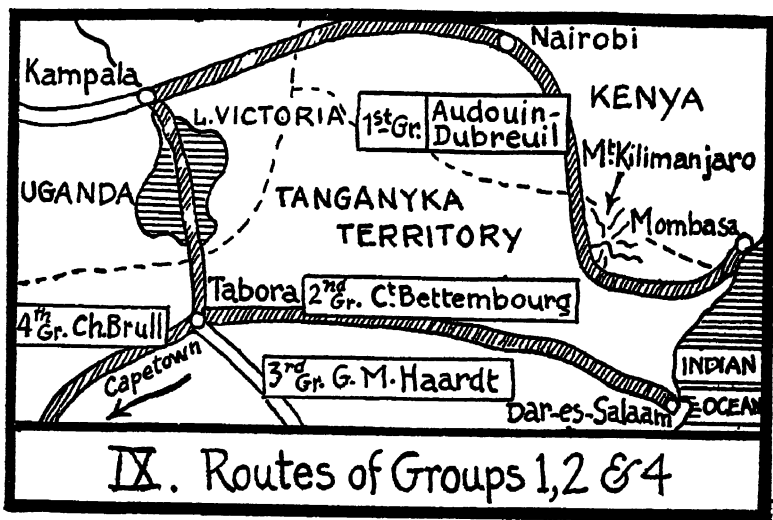
But a fresh murmur greets our ears, as familiar to mankind as an inner voice—that of the waves. The dark blue of the Indian Ocean extends to the horizon before our eyes.

Facing us is the Isle of Mozambique and the fortress of Vasco da Gama. We are at Mossouril, a seaside resort,

where we are to await the arrival of the boat from France in the house placed at our disposal by Colonel Cunhio.

These are days of rest and joy when, surrounded by my companions and friends, I am able to send this telegram:

Indian Ocean reached today, June 14, at Mozambique, the point on the African Continent nearest to Madagascar.



WHILE the Haardt group was reaching the port of Mozambique, the other groups were journeying with different objectives.

The first group, directed by Louis Audouin-Dubreuil, easily attained Nairobi, capital of the Colony of Kenya, by the sources of the Nile and the Rift Valley. But the automobile liaison of the town and the shore had not been tried; the first group had to skirt the mountain of Kilimanjaro, and pass through a brush sometimes difficult to negotiate. It attained its objective at Mombasa, May 16. (For details of the routes of the second and fourth groups, see Appendix.)

Chapter IX—From Lake Victoria to Mombasa

KAMPALA

WE bid farewell to our traveling companions *April 19*, at 3 P. M. They make a fine group, dominated by our friend of calm and cold countenance, tenacious will, rapid decision, and authority which makes itself felt. Near him is Baba, who is very sad. Baba does not like partings.

We take the route to the east, which, by way of the sources of the Nile and the Rift Valley, will bring us to Nairobi on our way to Mombasa.

Kampala grows fainter beneath the rain. We are traveling on a winding road between dark green shrubs. The rain beats down on our cars, the Silver Crescent and the Sun on High. They are bending under their load.

The Silver Crescent has still one of the heads of the expedition as a passenger, but his former inseparable mechanic and friend is no longer there—Maurice Penaud, who, like himself, has for five years been attached to the soil of Africa. He has remained with the group which will endeavor to reach Mozambique by Lake Tanganyika and Nyasaland.

Trillat takes the place of Penaud on the Silver Crescent. He possesses the same qualities, and the same robust health, but his hair is grayer; he is an untiring companion, with intelligence and foresight. He speaks English and will be the spokesman of our group in the British colonies.

From the commencement of the journey, Trillat has been on Bergonier's car. Over and above his duties as a mechanic he would find time every day to assist him in the

care of anyone who might be sick, and also in looking after our cooking arrangements.

Its most interesting adornment is lacking to the Silver Crescent—Baba, the trusty boy, who was almost always to be seen perched upon the top of the car, his outward appearance changing according to the time of day. On cold mornings Baba would disappear under his blankets; during the scorching afternoons he would smoke his pipe in a dignified manner, practically nude. Looking like a black spot on the white body of the car, Baba would often think of his mother and his fiancée, a pretty Songhaï girl, waiting for him at Timbuctoo.

On the other car are Léon Poirier and Rabaud, who have been with the Sun on High since we left Colomb-Béchar.

Léon Poirier is dreaming under the rain of his films, which he has been getting into shape since leaving Tessalit.

Rabaud is the youngest of our mechanics; his motto is: "Il faut que ça gaze!" At the present moment he is tapping on his steering wheel, whistling happily, so everything is all right.

There are gleams of light in the sky; the rain will soon stop. Rays of sunlight are filtering through the gray and rosy clouds; the sun is already low.

We arrive at the edge of a still stretch of water; the evening is full of charm, the sky is of a pale wash of color such as we see in Europe, and the scene around us is in harmony with it. We have reached the north arm of Lake Victoria, which, descending in a southerly direction, supplies the Ripon Falls, the source of the White Nile.

Our cars are on the ferry-boat. The black head ferryman vainly consults his tariff of charges to arrive at the sum he ought to make us pay; he is deep in reflection, with his head between his skinny hands. Suddenly he seems to have come to a decision, for he says with assurance:

"You have four carriages, two big and two little ones."

His second in command gives an approving nod. "Yes, each of the big ones has a child."

In his eyes our tractors are children. We tell him that these children are not yet able to walk by themselves. There is a long silence. Then he ends by saying:

"Your machines are very fine, very long, and very heavy."

A simple and convincing argument! With a satisfied smile we pay him double tariff.

In front of us lies Jinja, which we shall soon reach. Red canoes with long prows are passing by. They recall memories of the naval battles which in former times the black tribes delivered on the shores of the lake.

An English friend is awaiting us on the opposite bank. He takes us to the hostelry by way of a shady path at the side of a little grassy hill. One could not dream of a more delightful inn in more beautiful surroundings. No grandiose buildings introduce any discordant note into this charming spot. The hostelry consists of small buildings with thatched roofs; tiny windows with bright-colored curtains give a vague European touch. There is green grass interspersed with flower-beds between the little houses which are covered with creepers and honeysuckle.

In the shade on the grass a table is laid; it has a pretty table-cloth on which are displayed toast, cakes, and a large silver teapot, in accordance with British custom; comfortable armchairs are drawn round it.

Where are we? In Africa? Or in one of the traditional gardens of England on a fine June evening?

In front of us lies the shore where we were this afternoon, where the tsetse-fly and the lions hold sway; to the south we get a glimpse over the lake looking across little promontories. Two steamers of harmonious lines are moored to the quay, on which lie bales of cotton. The steamers carry passengers and merchandise over this little inland sea of Lake

Victoria; they ply between Entebbe and Kisumu, and on the southern side, to Mwanza.

To the north we see the top of a green hill which is used by day as a golf-course and by night as a promenade for hippopotamuses; it hides from us the bend where the lake becomes the Nile.

Before leaving we intend to go early tomorrow morning to see the cataracts giving birth to that great river which meanders slowly through brush and desert to the Mediterranean.

Twilight falls rapidly as we are finishing our tea; the scent of wild creepers and honeysuckle is wafted around us.

April 20—We have our breakfast in the little house which serves as a dining-room. There is nothing wanting; the Englishman takes his home with him everywhere; we sit down before a massive, well-polished table, adorned with a white table-cloth, laden with heavy silver dishes; there is porridge, eggs and bacon, and small jars of butter.

On the grass are two fair-haired little girls throwing grain to the pigeons and chickens; they are delightful children, typically English, clean, fresh and rosy. A magnificent blue bird is hopping about quite close amid a mass of yellow flowers.

Our white cars are now on the grassy slopes of the Ripon Falls.

Large crocodiles lie asleep on the rocks. The White Nile, for so long a mystery, is flowing to the north in harmonious curves; its banks, strewn with rocks and small shrubs, dominate it.

Our gaze rests on the opposite bank whence Speke discovered the sources of the Nile on July 28, 1862. On this radiant morning we recall the glorious history of this river, the father of ancient civilizations.

After traversing the green marshes of the Bahr-el-Ghazal, where huge herds of elephants come to drink, it winds ma-

jestically through the golden sands of the desert, and then, after passing and reflecting in its ruddy waters the vast monuments where the Pharaohs lie sleeping, it mingles with the blue waves of the Mediterranean. And the words of Herodotus come back to our minds: "Egypt is the gift of the Nile."

A few miles from Jinja we leave the route which goes northward toward the marshy plains where the White Nile spreads out before resuming its course in the direction of the Bahr-el-Ghazal, and take instead a small easterly track which will bring us to the frontier of Kenya.

When one leaves the great routes to bury oneself in the tracks and paths amid the forest, the brush or the savanna, it seems as if one penetrates farther into the heart of a country. The great routes never possess any special features.

Toward evening, just as we are reckoning by our map the distance separating us from Kenya, we notice at a turning in the track a young man of attractive appearance with a gun under his arm and a magnificent dog at his side—a type of the fine gentleman seen in the illustrated pages of English magazines. He tells us that Kenya is still a long way off. And so again, just like the kilometers through the Sahara and the Congo, the English miles seem to prolong themselves indefinitely on our route, and are more numerous than our maps show.

This gentleman very hospitably invites us to share his house for the night.

By a narrow pathway bordered on each side with coffee plants, we arrive at a small clearing on which are built four small round houses. One of them is our host's bedroom, another is his sitting- and dining-room. We shall sleep here in order to avoid getting wet in passing at night from one house to the other in the pouring rain. The two remaining form his kitchen and storehouse.

This young man has been living quite alone for two years; he still reckons to remain here for several long months. His only distraction is a day's shooting now and then, or a journey to Jinja, the capital of the district. His coffee plantation, of which he is very proud, is his sole concern.

We compare his life with that of the young men at home. They are also possessed of much courage, but how many of them, at the age of twenty-four, would be able to live alone, quite isolated, and still preserve intact their mental faculties and the smiling geniality of this young Englishman?

Dinner is served in style, but we have come at a time when his stock is very low, and we eat our breakfast food mixed with a little warm water out of a fine silver spoon.

This kind of grain food, which we are fishing out of our plates, looks like small fragments of rubber; it is very much appreciated by the sporting English who make a point of taking it before breakfast to keep their jaws in training.

We arrange our camp beds in the room where we have just dined. On leaving, our host strongly advises us to close the doors firmly, for all through the night there are panthers roaming about and they will enter any dwelling.

"It would be particularly dangerous," he tells us, "to leave your door open if my dog remains in your room. I had a dog carried off by one of those huge wildcats of the brush. The disappearance of my two monkeys was much more tragic. The poor little animals had shown great uneasiness for several weeks when I put them at night in my storehouse. I had not guessed that they scented the danger of their approaching death. If they had been able to speak, even in bad English like you—excuse me, but you will understand, won't you?—I should have taken greater precautions. One night the panther made a hole in the thatched roof, and I never saw my two monkeys again. When the panther carried off my dog she left behind at least two humble souvenirs of him—his paw and his tail."

It was so hot during the night that Rabaud opened the two doors of the little house. At daybreak, when we awoke, our host's dog, so coveted by the panther, lay asleep on one of our beds.

Next day about midday, we come out onto vast plains shut in by distant lofty mountains, after having traveled all the morning on a good track winding through patches of savanna. We recall the wide spaces of the Sahara as our eyes again see with joy and delight the far-distant horizons, which since leaving the Soudan have been shut out from view by the trees dominating the tropics.

When passing near some kraals where naked shepherds are driving their flocks, we halt in front of an old English farmer; he is upstanding and alert, with a large gray felt hat overshadowing his wrinkled face. He questions us with a hearty laugh:

"And where do you come from in a turnout like that?"

"From the Mediterranean, by road."

"Well, hurrah! Come and drink my last bottle of whisky with me!"

What a fine chap! Twenty-five years in Kenya! They certainly stay in this colony.

We stay chatting with him for a few minutes at the door of his modest dwelling, drinking the traditional whisky and soda, which has no frontiers for the English.

"You are here at the gates of Kenya. When you have crossed those mountains"—his lanky hand points to the northeast—"you will then descend again to the southeast by the Rift Valley, which is the paradise of British East Africa.

"Beware of the bridges!" he calls out as we start off again. "Your cars look small, but they seem to be very heavy for their size!"

Shall we again experience crossing bridges which sink under us, and traversing rivers on makeshift ferries in the appalling heat of the south?

Yes, we shall certainly have our surprises, but comparatively few beside those in store for our friends in the group which has started for Mozambique on the Golden Scarab.

The sun is sinking when we reach Mumias, a small village of corrugated iron roofs in the middle of the plain, very like those met with in the remote steppes of Russia and Asia.

A motley crowd throngs around our cars—Hindus, negroes and Arabs. What a contrast is offered by a little Hindu girl, dressed like a pretty little doll, with her silk dress, her golden necklets and her black head of hair, beside the naked negroes and small Arab boys in their shirt-sleeves!

On a dark wet evening, we retake the road which goes up to Kakamenga.

We arrive at Kakamenga at ten o'clock at night in a cold rain. The deputy commissioner receives us by his fire.

Next morning as we leave the rest-house there is a fog still lying deep over the valleys.

We start on a barely discernible track; it is little frequented, for automobiles coming from Lake Victoria take the direct route from Kisumu to Kapsabet. It is a continuous ascent, during which we sometimes obtain fine views over Lake Victoria and Mount Elgon. Some of the bridges give us moments of real anxiety.

This district is the Native Reserve of the Nandi. The English have made not only game preserves, but also race preserves. Apart from a few centers where foreigners have the right to settle for purposes of business, all the land is left to the natives. Certain reserves, like those of Kikuyu and Kaviron, are given up to agriculture; others, like those of the Nandi and the Samburu, are pastoral.

Women with their arms and legs covered with bracelets silently watch us pass by. They have their heads shaved.

A quantity of flexible rings of different sizes form a kind of collarette round their necks. The men generally are naked, though some wear a short tan-colored hide on their shoulders, falling loosely over waist and stomach leaving the back visible when they walk. They are tall and slender, their bodies the color of burnt sienna. Both men and women have the lobes of their ears pierced and hanging very low.

We arrive at Kapsabet about midday. From a wooden bungalow of charming construction, standing in the middle of a garden of beautiful green turf, the commissioner steps out, accompanied by a lady in a light dress. By the door two horses with fine saddles are being held by a boy in a long white shirt. From the terrace in front of the bungalow the heights of Mount Elgon can be seen.

After a few ascents and descents with sharp turns, we arrive on a large plateau of short grass. The view spreads out to the infinite. In the twilight we distinguish the summit of Mount Elgon in the northwest. The dying rays of the sun give a rosy dash of color to the darkening mists resting on the top of the mountain, and we think we see layers of snow. From Lake Albert we were not able to catch a glimpse of Ruwenzori; Mount Elgon is therefore the first great African mountain which the Expedition has seen, and we already begin to think of Kilimanjaro, the highest of all, which we shall endeavor to view in a few days.

Large herds of zebra are galloping on the plain.

Night falls with a cold rain; our speed becomes slower; the road has become a muddy track.

Shortly afterwards our headlights show an iron-roofed town; this is Eldoret. This new town has taken a great spurt since the railway reached it a year ago.

"What is the use of building a railway in this immense void?" many ask. Are they not aware that from day to day, in six months, ten years, fifty years, it will bring life, civilization and wealth to our children?

We leave Eldoret and go over an endless plain gradually rising toward the east. Eldoret, the capital of this new territory, grows smaller and smaller in the distance; behind us rises Mount Elgon, full of majesty in a cloudy and gloomy sky.

The plateau is covered with thin grass; not a tree is visible, but here and there are a few thorny bushes. After accomplishing ten miles we begin ascending the gradual slope of the mountain. The cold becomes more and more biting. Another twenty miles on, a few trees appear.

We pass heavy wagons led by strong-looking natives wearing short ponchos made of hide or bark; a few colonists with large felt hats accompany them.

These Transvaal wagons, heavy, strong and rustic-looking, are harnessed to twenty or thirty yoke of oxen and make slow progress on the broad track; they are a vision of early days in every civilization. Did not the first Canadians and Americans make their trek to the west in just this manner? Did not the Boers push forward into the hitherto unknown plains of the Transvaal in these same wagons?

And thus do long, conquering caravans composed of rough-looking men push out toward the west; these men of nomadic life will one day settle down at a spot definitely chosen for starting a new ranch, which, like so many others, will also become an active center of civilization.

In this way the United States has become progressively peopled, just as little by little the Boers and Afrikaners have pushed back barbarism in South Africa, and as in the antipodes Australia has become a rich and prosperous nation. And has not Europe also, in days gone by, known these same transitory conditions? Was not France, at the dawn of its marvelous history, covered over with dense forests in which a wild population built its primitive huts? In places which were to grow into flourishing country districts we might have seen in those days uncultivated savanna and marshes infested with monstrous wild animals.

Were not the first Roman colonists who dared to build their villas on the banks of our rivers like these hardy Anglo-Saxons whose mighty work, even now so fruitful although hardly yet begun, we are now contemplating?

A little farther on we pass a solitary wagon, smaller than the others and drawn by eight yoke of oxen. A woman is seated on it with a child; she is dressed in black and carries her head high; her face is marked with a deep sadness. Is she a widow now compelled to struggle on alone? In any case she is a woman leading a life of toil. There still exist colonists who gain a livelihood only by hard labor.

In proportion as we ascend, the track gets narrower; sometimes it assumes an alarming incline; but are not our caterpillars able to grip anything? They easily pass over these difficult places.

We often turn round to look at Mount Elgon still rising in the west. The farther off we are the more majestic it appears. We look at our map; we are now at the top of the mountains, at a height of between 5,000 and 6,500 feet. To the west there are gentle slopes; to the east, ravines and more rapid descents. The tops of these mountains are clothed with short grass, and here and there are clumps of trees of different kinds, covered with gray lichen. The vegetation recalls that of temperate climates.

To our astonishment we see, a little farther on, at a height of more than 4,500 feet, a sample of the splendid work of our English friends, in the shape of a railway—that of Nairobi to Eldoret.

One of the engineers of the line occupies with his wife a small house near the railway station. We have a few minutes' chat with him. He advises us to go down towards Londiani instead of continuing on the Alma Ravine, for the track is better.

"If you have any time to spare," he tells us, "go by the ravine, but pay attention to the turnings!"

At 3 P. M. as we are going down towards Londiani, through ravines, grassland and woods, we cross the equator. The line, which many suppose to be so hot, this mark on the map of the world, which like any child we had regarded with alarm, this equator, where the sun ought to scorch everything, we cross actually wrapped up in our coats, at a height of 8,500 feet, in the midst of the vegetation found in temperate climates.

We follow on our course by a track through ravines used by certain cars in fine weather, but in the rainy season impracticable. The colonists then make use of ox-drawn wagons.

Before nightfall we are installed in the hotel at Londiani. It is a little hotel typical of those found in new countries. Three small, low-built houses, consisting only of a ground floor, with a small veranda in front. Everything is built of wood.

In the bar there are old newspapers, torn books, broad-brimmed hats showing many signs of wear, old guns, spurs, and well-colored pipes. A Hindu barman, who has already drunk a few bottles tonight to test their quality, stands with a dignified air behind the counter.

At this bar it is the custom to drink oneself dry; there has been specially heavy drinking these last two days, which were market days at Londiani.

The colonists living in this region, rough-looking men, swallow large glasses of alcohol, skilfully mixed by the barman, which makes their throats tingle. The wooden walls are strongly impregnated with the odor of gin and whisky. The landlord has lost an eye, but the eye still remaining is a good one, and enables him to keep a sharp lookout in his bar and hotel on market days.

Under the wooden veranda we drink several cocktails with young Captain Campbell, the heroic English aviator who, with a few comrades, made the first passage from Lon-

don to Cairo. He now owns a large amount of land in the neighborhood of Nolo. His partner is a former Russian diplomatist.

A very gray and somber evening falls over this strange scene. We go to our bedrooms, little wooden huts giving the impression of quite cozy quarters. It is very cold. A few naked natives, some crouching on the ground and others leaning on their spears, are warming themselves near a fire.

Next morning we go through mountainous districts with easy inclines, where numerous herds of cattle are grazing.

After leaving Nolo we again meet Captain Campbell, who is waiting for us by the side of the track with his bridle through his arm. He has the aviator's fellow feeling, and has been there since early morning waiting for us to pass. But aviators do not always make their appointments in the air; today, one is on horseback and the other in a caterpillar.

We have a long chat with Campbell on the subject of agriculture and stock-raising in this country. Attempts to grow tea at the bottom of the valleys are being made; on the sides of the mountains the pasture is excellent; horses, oxen and sheep graze there in large numbers. Veterinary inspection enables them to take timely precautions against disease. The chief disorder to be feared is the "east coast fever" which is propagated by a tick of the name of "win-depest."

As soon as the epidemic is signalized very severe regulations forbid all transference of the flocks to the mountains. The principal crop in the district is maize, which is so valuable for making that excellent whisky drunk in every good colonial house.

In this district the farms, as a rule, are from 1,500 to 5,000 acres; in other parts of Kenya they run to 25,000 and even 50,000 acres.

The English have no hesitation in building pleasant and

attractive houses. Their efforts are splendidly seconded by the banks, both at Nairobi and in England, which make large advances to all the colonists. As in every other part of the world, the lack of labor is the principal hindrance to an expansion in cultivation. For want of labor a large quantity of maize has not been harvested this year.

Europeans make a great mistake in thinking that the Dark Continent is an untapped reserve of workers and soldiers. It is not so at all. Everywhere we passed we noticed a scarcity of laborers. In the Tchad region the black population has been greatly reduced by the massacres of Rabbah, and in the Oubanghi and Congo districts by sickness.

In Belgian Congo there is no lack of workers, but they already anticipate that with the development in cultivation there will be a scarcity in four, five or ten years.¹ It is true that when this time arrives the means of transport, which are already remarkable in that colony, will have been further developed, and with the help of modern machinery this difficulty may be overcome.

We continue on our way, leaving Captain Campbell standing by his horse at the side of the track.

Over a track which is sometimes very narrow, winding round the top of small valleys, we proceed to Nakuru. We pass wagons drawn by several yoke of oxen and guided by the shrill whistles of natives from Kikuyu. Hardly have they disappeared when an elegant car, driven by a fair young woman, comes up to us at a quick pace. It is a strange contrast after the wagons that recall a former age. The car, which is skilfully driven, passes by so quickly that we have barely time to get out of its way.

At five o'clock we reach Nakuru, a smiling little town on

¹ At an evening party at the Royal Palace in Brussels, Prince Leopold confirmed our surmises as to a coming lack of labor in Belgian Congo in the near future.

the border of a beautiful lake, where we receive a very kind welcome at the Rift Valley Club.

There is a golf-course and tennis-courts; the houses are built of wood, with comfortable rooms and spacious arm-chairs. There is a bar, at which two immaculate barmen skilfully ply their silver cups.

Excellent cocktails are served after golf and tennis. That evening the following incident occurs, which the jovial gentleman, our host, will not mind our relating.

At the first cocktail this stolid Scotchman, who has not been in France for a long time, can only muster, with great difficulty, a few words of French. At the fifth cocktail the words come more easily to his lips, and some of his expressions strike us as being even very good; at the eighth he gives utterance to very well-reasoned remarks and quotes from Pascal and Descartes; at the twelfth he becomes very talkative; at the fifteenth he sings an old French song of the eighteenth century, after placing (oh, miracle!) this last glass of cocktail in his pocket without spilling a single drop!

April 25—During the morning we pass by Gilgit, another new iron-roofed town. Near the road there were ostriches and zebras; there are a few lakes in the valley, and we can see mountains, former craters with flat tops.

At four o'clock Lake Ivasha, which is larger than the others, spreads before us in the valley. Dark clouds are appearing over the tops of the mountains surrounding it to the south; the wind stirs up clouds of dust on the road where two cars have stopped. Major Vavasour Dawson, the senior commissioner of the district, and Major Ramsay Hill have been awaiting us for several hours.

We accept the hospitality of the senior commissioner. His house dominates the valley and the lake; it is surrounded by a flower garden, and amid the flowers the rugged stems of aloes stand up.

Just before twilight falls the wind begins to blow violently, and the clouds through which the rays of the sun are piercing cover the lake with mauve reflections. The scent of orange and mimosa trees is wafted to us.

A lady, elegantly attired in green, steps down from a sumptuous Rolls Royce; she is accompanied by a colonial, a finely built man, well tanned by the sun. They are followed by some boys.

We do not suspect this evening that this English lady of whom we catch a glimpse in these romantic surroundings will a few days later on, at the request of the Automobile Club of Nairobi, be the gracious representative of England with our expedition.

April 26.—We arrive at Nairobi.

We are in the heart of the city; a city of substantial-looking public buildings; private houses; the New Stanley Hotel in Sixth Avenue; the offices of the Standard, a daily newspaper having a circulation of fifty thousand; motor-cars drawn up again the pavements, touching each other. Then we come to a picturesque note: swift rickshaws, accompanied by shouts and the tinkle of their little bells. Elegant English ladies are seated therein; the two blacks drawing them at a brisk pace are curiously dressed in shorts and tights striped with the same color. Black policemen, as if trained in London, direct the traffic in a dignified manner. News-venders rush by at a run; calm-looking Hindus, seated at their doors, are talking together.

We remain a few days at Nairobi.

On April 29 the Automobile Club gives a dinner in our honor, at the end of which the proposal of the members is adopted by acclamation, namely, to delegate Mrs. Ramsay Hill to accompany our cars as a passenger, in order that an English lady may share in the honor of our Expedition—the first to connect Nairobi with Mombasa by automobile.

Although it is possible to travel from the capital of Kenya

to the coast in a comfortable sleeping-car, an automobile has never yet accomplished this long distance. No motor-car has yet dared to risk the old tracks.

On Tuesday, May 2, the Silver Crescent and the Sun on High are in front of the New Stanley Hotel. Our two cars, standing in the midst of a crowd of Europeans, are all ready for departure; they have again donned their campaigning war-paint with bulging coverings, pails and bags hooked on behind, and rifles in their cases hung to the sides of the seats.

The little French and English flags flutter in the breeze. A murmur of satisfaction passes over the crowd. Slowly the caterpillars grip the long avenue which is to take them to the road, then to the track, and then to the plains of Massai and the savannas of Tanganyika.

At midday we have our first lunch under one of those large trees whose appearance recalls the old box-trees of Europe. They dot the slightly undulating scene, shut in to the east by a few high hills on the sides of which we can see herds of antelope, zebra, and a few giraffes. We are now in the great hunting preserve of the Massai, one of the richest districts of East Africa in wild animals.

Soon the horizon broadens out; clouds gather, and then rain begins to fall. We pass through very broad and shallow valleys, where we have the opportunity of seeing for the first time the black soil which they call by the name of "black cotton." The tires tread into it and then sink; our cars are soon covered with black mud. "Black cotton" will be the terror of all our parties should they encounter it on their itineraries; it is a black and fine soil which changes into mud at the first rain, but is very rich and is suitable for cotton growing.

Twilight falls; the rain continues in squally showers reminding us of Europe.

Our passenger is smiling; she would not change this for

English fogs; before becoming acquainted with the African sun she lived from childhood amid the rain and fog of Yorkshire. She retains all her high spirits while we, who are wanderers from the Sahara, are exceedingly downcast but do not dare to own it.

Our progress continues slow. We sink down in the black cotton; our little white cars, which looked so smart in the wide sands of the desert, have now a sorry appearance in their covering of black mud. They creep along over this endless plain, under gray and low-lying clouds barely relieved by the dying gleams of vague light in the west.

We continue through the darkness on a track so faint that we sometimes lose it altogether.

At 8 P. M. six luminous points are seen a few hundred yards in front of our cars. As we get nearer we become aware by their fiery gleam that they are the eyes of wild animals; soon we distinctly make out the silhouette of three lions. It is only when we come to within fifty yards of them that they leave the track and retire into the prairie. The headlights of the leading car follow the disappearing animals, which sometimes stop and look back in our direction.

We pass the remainder of this wet night at Kashado.

At the first gleams of daylight we get our cars ready.

Large clouds drifting eastward make us afraid that we shall encounter as bad weather as on the preceding evening. But toward 7 A. M. the sky becomes blue, and the appearance of the country changes. It is no longer a prairie with large shallow depressions; the ground becomes more broken up. Soon we are passing through stretches of large and small prickly shrubs, the squat form of which shows strangely on the horizon.

After crossing a few sharp ravines over these prickly growths we see an interesting sight; when we get nearer we distinguish the heads of giraffes and their bodies showing

through the thin branches of a tree. They are eating in a dignified manner the flowers on the top branches of a mimosa tree; they crop them delicately, then chew them. We are quite close when the sound of our engines suddenly disturbs their meal. They move off slowly at first and then take to a clumsy gallop.

Here and there we pass natives, either singly or in groups, driving large herds of oxen and sheep; they are Massai. Their appearance is perplexing; they look like slim women; their faces are effeminate with deep-set and appealing eyes. They wear a short covering of hide or bark, which floats from their shoulders showing their hips and legs as they walk. The lobes of their ears are pierced and some of them wear wooden earrings; their hair is gathered up in small plaits at the top of the neck; bracelets encircle their long, thin arms; they carry a short, thin spear, on which they lean when talking. Their gestures are slow and have much grace; they remind us a little of the Touaregs, whom we have already met in the Hoggar.

At about 1 P. M. we stop for a few hours' rest beneath the meager shade afforded by a few flat-topped prickly bushes. We take out our tables, chairs and cooking appliances; our blue-checked table-cloth is spread on the green grass of the flower-strewn prairie.

A little way off a herd of zebra is grazing tranquilly. Poirier takes out a small cinema apparatus which serves him for filming rapid scenes, approaches carefully and arrives within twenty-five yards of the herd. At the moment when he slowly rises from the grass the zebras are startled, but do not move; when, however, they hear the click of the apparatus they make off, rearing on their hind legs, and kicking out.

Poirier discovers that he is covered with red ticks; we make the same discovery, and in order to finish our lunch in greater comfort we move off to a spot where the grass is not

so high. We take up a position in the sunshine, much to our regret, for the last hour has been very restful in the shade, and one always feels more inclined for the afternoon stage when one has had a good rest.

Today we have been successful in photographing several herds of zebra, giraffe, antelopes of all kinds, and also one of those strange animals the gnu.

Before nightfall torrents of rain render our progress more difficult than on the previous evening. The crossing of a river, which we endeavor to ford, is very dangerous, for the banks are steep and slippery. In front of us rises a high mountain; a little farther off are others which are still higher, but their tops are concealed by cloud; they are Mount Longitudo and Mount Meru.

Toward the south we dimly see the bolder mass of Kilimanjaro through a cloudy sky, lighted up by the gleams of rapidly falling twilight.

We continue on our way by the light of our lamps, on a winding track through woods, where we see the traces of elephants. At a turning we come across huge forms disappearing through the trees, but the wood is so dense that our projectors grope vainly about in an endeavor to throw light on the strange vision which we have seen.

Suddenly, thirty yards distant, two lions are clearly outlined in front of our headlights; one of them has a long mane streaked with black.

Of all the sights we have seen in the brush none of them surpasses in grandeur what we see tonight. For a few seconds, at a distance of less than twenty yards, our cars and the animals confront each other: the African lion, the fiery-eyed king of beasts, which in every age has reigned absolute master in the forest, the savanna, the plain—and the modern beast, the eyes of which are our headlights and powerful projectors throwing out a blinding white ray. For a few seconds a silent struggle between these two beasts takes

place in a kind of fascinated torpor, only broken by the regular beat of the engine. Then the lions slowly go away and disappear in the tall undergrowth.

At about nine o'clock we come near a few huts. We think we are at the little village of Longitudo, which is marked on our map by the name of the neighboring mountain. The inhabitants are certainly unaware that their village has been thus named by geographical societies.

"Longitudo is up there, very high, and is inhabited by lions: why do you wish to go there tonight?" they ask us, thinking that we are speaking of the mountain.

We remain in this little village.

On the following morning we continue on bad, much broken tracks toward Mount Longitudo, with its lofty peak dominating us. We go along its base to continue our way towards Mount Meru and Mount Arusha.

When stopping near two deep ravines, the abrupt edges of which we are leveling to allow our tires to pass over with the least amount of difficulty, some Massai natives pass by. Through the intermediary of one of our boys we carry on a difficult conversation. They speak of the mountain, their hunting, and their dangerous neighbors the lions. One of them, leaning on his lance, declares with much gesticulation what we may translate as follows:

"In our families we have always the honor of having had at least one relative eaten by lions."

In spite of our labor with spade and pickax the ravine is rather difficult to negotiate. At the bottom our cars disappear beneath a mass of vegetation and flowers; they then go up the other side on their hind legs, like white monsters emerging from their green hiding-places.

We are now rolling over a treeless plain between Mount Longitudo and Mount Meru. On our left, toward the east, we see what forms the base of Kilimanjaro, nearly the whole of which is in the clouds. Shall we have the opportunity



Crossing a river in Tanganyika

of seeing the mountain mentioned by Herodotus, which for more than two thousand years remained unknown to the people of the West, although this Greek geographer noted its existence four centuries before the Christian era?

We skirt along the base of this enormous and mysterious mountain. In the flower-strewn plain traversed by our track, grasshoppers with pink wings, and little partridges with yellow collar-bands fly in front of our cars.

In the evening we begin the ascent of the slopes of Mount Meru; we catch a glimpse of its top for a few moments. Behind us Mount Longitudo is clearly defined in a blue sky, but Kilimanjaro remains veiled; we shall not see it today.

A cold wind gets up the higher we rise, and sometimes, when our cars on their hind legs are hanging on to the side of the mountain, we can contemplate the distant and gleaming peaks in the west outlining themselves as though on a Turner canvas. By the time we reach the top of the peak night has fallen and the moon is rising and lighting up the summit of Mount Meru, which now looks quite near.

At 8 p. m. we begin descending the opposite side. The track becomes better. We cross over a few fords. There are lights in the valley coming from the dwellings of colonists. We might be on the edge of an equatorial forest—large-leaved shrubs and clouds of mosquitoes surround our lamps. There is a light on our track in front of us; shortly afterwards a car stops, and we are met by the altogether unexpected sight of two gentlemen in smoking jackets, and three ladies, whose half-open furs reveal their low-neck dresses; they give us a cheery greeting.

Will Tanganyika, like Kenya, have in store for us such sudden contrasts—wild animals and wild mountains contrasted with a very European civilization?

The route we are now following goes through exuberant vegetation. The glare from our lamps plays on a great variety of greens.

We arrive at and leave Arusha, a dreary little town buried away in the exotic vegetation on the south side of Mount Meru. The vegetation diminishes the farther we proceed. The road is nothing but a series of rises, and short but very steep falls. Numerous small streams run down the declivities; they are clear and rapid, but have little depth. We keep away from the bridges. We see zebras and antelopes in the plain.

We are slowly going down again, leaving Mount Meru behind us. To the northeast Kilimanjaro rears its huge bulk, which is still hidden in cloud.

At four o'clock, when we are twenty or thirty miles from Moshi, there is a chink in the clouds, and we experience the great and joyful sensation of catching a glimpse, for a few seconds, of the snowy peak of the highest mountain in Africa. Will it always surround itself with its mysterious veil of mist?

The sun is sinking; the summit of the mountain again reveals itself majestically; little by little the clouds appear to lift themselves from the sides of the whole mountain. Then moonlight succeeds the daylight, covering with a bluish light the huge mass, the round summit of which rises to a height of more than nineteen thousand feet.

We are staying today at Moshi in order to renew our supplies and overhaul our cars, which will have to make a great effort to reach Tanga. We also desire to obtain information from the senior commissioner as regards our itinerary.

We go to his house; he is a distinguished-looking gentleman, and his glance is full of intelligence. Mr. Marshall is a man of initiative. Everything we ask him appears to be quite easy of realization in his opinion. We make a lengthy study of tracks on a large map hanging on the wall. Our lady passenger, who knows how to read maps like a staff officer, acts as our interpreter. Poirier, who is as skilful a

draftsman as he is a musician, rapidly makes some sketches, the usefulness of which we are to appreciate later in our journey.

On the map there certainly exist tracks by which to reach Tanga, but some pass over ravines with broken bridges, while others have been completely abandoned; vegetation has entirely covered them over and even the natives confess themselves incapable of finding them again.

There is no track at all between Korogwe and Muhesa, a distance of fifty miles. The itinerary from Moshi to the Indian Ocean will probably be very difficult, and will take a long time.

The director of the railway joins us in the senior commissioner's office and gives us his cordial authorization to make use of the railway bridges for crossing certain rivers.

In the afternoon Major Perkins, who has attempted the ascent of Kilimanjaro and nearly reached the summit, discusses it with us. The first few miles are relatively easy, but the flat top of the mountain offers certain difficulties.

The whole of East Africa is habitable up to the line of the eternal snow, which is found on Mount Kenya (17,040 feet), and on Mount Kilimanjaro (19,710 feet), at a height of about fifteen thousand feet.

As regards vegetation and forest they are to be found on Mount Kenya, to the north of the colony, up to a height of twelve thousand feet, and on Mount Kilimanjaro, to the south, up to about ten thousand feet. Hans Meyer, when writing on Kilimanjaro, notes the existence of a warm current of air coming from the northeast, at a height of between thirteen and eighteen thousand feet.

Kilimanjaro, discovered by Rebmann and Krapf in 1848, is an extinct volcano covered with forest up to between six thousand and ten thousand feet. Below this altitude there is cultivation in places. The belt of the forest has a depth of from five to seven miles; only a small portion ex-

tends beyond the British frontier. The grass-covered slopes extend up to thirteen thousand feet; above this there is snow and glaciers, descending in the southwest direction down to 12,500 feet, and northward to 18,700 feet. Kibo, the western peak, is called by the Massai Ngài (the House of God). Mawenzi, the eastern peak, reaches a height of seventeen thousand feet. The difference between the altitudes at which snow is found on the north and southwest is due to the warm current of air already mentioned.

Several attempts to climb Mount Kibo had been unsuccessful before, in 1888, Dr. Meyer attained the summit. He was followed by several other German explorers. The first Englishmen to climb the mountain to the top were Gillman and Nason, in October, 1921.

In the evening, while the moon is bathing the snowy summit of Kilimanjaro, we dance on the terrace of the senior commissioner's house, who, with English good humor, repeats each time we attempt to leave: "Just another one-step. Just one more whisky!" While a colonel, an inspector of the hunting reserves, talks incessantly of his regulations and the habits of his charges, the wild animals he is sheltering.

We have left Moshi this morning after being photographed pointblank by Major Perkins, the correspondent of the Daily Mail. Where will correspondents and reporters not come?

We go for a few miles through a country of savanna, and then come to a railway bridge, which will enable us to cross a river, not very broad but very deep. The sleepers are rather far apart and extend for a very short distance on either side of the rails and so, for several hours, aided by a few natives, we are kept carrying beams of wood from a distance a mile away, in order to facilitate the passage of our cars.

Night has fallen by the time we complete this laborious

work. Our cars go slowly forward astride the rails. To right and left yawns a deep hole; the slightest touch on the steering wheel and we shall turn over! The seconds seem long, and still longer when a beam of wood gives the slightest slip, or cracks. At last the two cars are on the farther side. We send them down headlong; one goes quicker than the other, but there is no obstacle in front, other than little spiky bushes, through which they pass and soon come to a standstill.

We camp at some little distance from the railway, for there is no longer any track to be seen. Tomorrow we shall have to find a guide to show us the way through a few miles of small thorny copse.

When we halt at midday, May 8, we have done only ten miles. Last evening we had covered only twenty-five. If these difficulties continue shall we reach Mombasa in time to catch the Dumea, which is to take us to Madagascar?

The ten miles we did this morning were through thorny woods which tore our hands and arms, and reduced to rags our clothes and sun-helmets.

The tree beneath which we halt in order to extract the thorns from our clothes and our tires is an enormous one, surrounded by high-growing vegetation. The heat is oppressive and damp, and we breathe with difficulty in this dense verdure.

We are having a hard day with steep declivities, numerous ravines, and little or no track.

Night has hardly fallen when Rabaud's car finds itself on the edge of a gully. The slope is so steep that, pushed on by the weight of its three tons, it makes a giddy plunge forward, but remains firm on its feet—a white spot with its two luminous eyes at the bottom of the gulf. The incline is improved with a pickax and shovel, and the Silver Crescent assists the Sun on High to get out of its hole.

But tonight misfortune pursues us, and soon afterwards

the Sun on High sinks deeply in a swamp. We bivouac quite near; we shall wait until tomorrow to extricate it from its sorry position, and start in now to repair the damage which these two mishaps have done to the car. We are all in good spirits despite these many contretemps.

We go on repairing it till midnight when the bivouac begins to settle down to sleep. Beautiful moonlight caresses the mountain soaring above our heads, and bluish mists hang over the valleys. Mystery seems to be brooding over the night.

We work all next morning in the oppressive heat of this marshy hollow in which our two cars are squatting. In the afternoon the Sun on High is ready to start again; but we do only about ten miles before night overtakes us at Lambini.

The native chief of the district, clothed in a long white shirt, comes to meet us holding a stick in his hand. He stops a little way off and salutes us with a stiff inclination of the head. We recognize the German salute which he must have seen given by his former masters.

The choice of a guide is difficult, for none of the natives wish to bivouac in the plain beyond Lambini. All are in terror of lions, which hold sway over the district at night-time.

After a few miles on a very bad broken track, which is hardly visible through the thorny bushes, we halt.

As we are arranging our bivouac a powerful roar is heard quite near one of the cars. Poirier, who is jotting down some notes while leaning on the steering wheel of his car, projects the flash-light over the plain; its bright eye is searching the night.

Our kitchen boy lets his pot fall, and our black guide suddenly pales. Both of them tremble, and explain:

"That is terrible . . . I never heard the like. . . . Almost under the car!"

The roaring suddenly ceases. Was it in reality a human voice blowing through a petrol strainer, or really the alarming roar of a monster? Some of us will never know, others will always have their suspicions, and the possible cause of it all will not boast of it for many a long day. In any case, our guide and our boy will tremble all their lives at the thought of it, and the plains of Lambini will guard the secret forever.

The following morning we have the luck to hit on a good track which brings us to Same. It skirts some mountains to the north and vast plains to the south. After Same we find a splendid road at about 11 A. M., which lasts for fifty miles. The vegetation is rather dense; the valleys are not wide and are dominated by wooded mountains.

We have to cross several metal bridges along this route, some of which are half broken down. This sorry spectacle is the result of melinite.

In the afternoon we pass down the broad and fertile valley called the "Valley of Peace." What irony! for here we see fresh traces left by the war—fine iron bridges built, as it would seem, for the passage of heavy artillery, now lying in ruins by the side of deep rivers.

Next day we again come to very bad tracks, often entirely effaced for a distance of several miles by the vegetation which has sprung up, or by the heavy rains. We proceed as best we can through the tall grass. One of our cars suddenly rears on its hind wheels with the bonnet on a huge rock. The steering wheel had come out of its socket.

We halt at about midday near Masandi to repair a few broken treads, one of the cars having run against some rocks at the bottom of a hollow hidden by the vegetation.

Trillat and Rabaud, whom we help as much as we can, are working under an appalling heat. The latter has a very bloodshot and painful eye.

Toward nightfall we cross two railway bridges on the

Mombo railway. The engineer of the line renders us the greatest service; but what a thrilling crossing over a deep river! Are we going to lose our cars and all our records just when we are attaining our end? When these exciting moments are over we greatly enjoy our whisky and soda with the English engineer before resuming our journey to Korogwe.

The splendid road we were counting upon is nothing more than a very moderate track with uncertain bridges. Very light vehicles, however, on the regular traffic between Korogwe and Mombo can pass over them without any fear.

At about nine o'clock in the evening we come upon a small space without weeds or grass; here we halt to bivouac. Behind the mountain we see a gleam of light in which two trees become outlined; it is the rising moon. Then dark clouds creep low over the horizon. A few heavy drops of rain patter on the aluminum of our cars. Our tent and beds, covered over by tarpaulins, get blown about during the night by sharp squalls.

A gray dawn, water is lying on our cars and tarpaulins, but the strong sun comes out and soon absorbs the moisture.

More bridges of doubtful stability. We are compelled to avoid some of them by passing through small, shallow streams where the ground is solid. A flat country stretching out to the horizon; here and there low-lying mountains and very green hills, up which red-tinted paths lead to little villages, giving a bright spot of color against the vivid green. The atmosphere is depressing, and the heat very great.

We leave Korogwe at 2 p. m. after Poirier and Rabaud have made a reconnoiter to the north. There is no proper road by which to reach Mubesa, about twenty miles off. The route we actually choose makes it over fifty miles. We go boldly to the north in order to utilize old tracks which

may perhaps bring us back to the south and east, to a district where automobiles run. We should then be not more than forty miles from Tanga.

Before twilight we cross a bridge which we negotiate by using the small beams of wood we are carrying on our cars. This bridge is twenty yards long and fifteen high. We pass over these beams, the breadth of which exactly corresponds with the outer edge of our tires. Is this to be the last feat of balancing which we are to make our caterpillars undergo? If a plank slips, we must inevitably fall.

During the night we run over a narrow path with difficult rises and falls. Sometimes the tall grass covers the track, presenting an emerald-green barrier in front of our headlights.

We make a halt before descending a declivity which is so steep that our projectors, focused on it, are unable to pierce the bottom. We get out and examine this black hole on foot. As a result we decide to camp on the spot and wait for daylight.

We are assailed in succession by every kind of insect. First we have the light and graceful fireflies casting their silver flashes over the green depths; then come larger, heavier and less brilliant insects; finally, at about eleven o'clock, these disappear, while others whose wings will no longer enjoy charms of a vagabond life, strew our cars, our bivouac and the ground.

We have already noticed that multitudes of fireflies and winged insects have their special hours during the evening and night for making their adventurous raids.

Wednesday, May 13—It is sometimes disappointing when one believes the end has been reached to see unexpected obstacles incessantly looming up. We are less than sixty miles from Tanga, which we should reach tonight; but in face of the ever-increasing difficulties presented by the morning we are wondering whether our arrival will not

be delayed for several days. Since starting we have had nothing but bridges in ruins, the crossing of streams, the plowing our way through tall grass entirely covering our cars; trunks of trees, and the avoidance of rocks which are barely visible.

By the afternoon we have accomplished less than twenty miles. One of us is often obliged to climb to the top of the car to give directions which way to go. In the evening we hit upon a path passing through small woods of *céréas*.

Our wearisome course through the midst of tall grass and savanna is over. We again find the railway line. In a gully we notice several overturned wagons, all twisted and burned—still another relic of the World War. On the top of the hill there stands a house which might have been transplanted from a corner of the Black Forest or Thuringia; it has a comfortable appearance, but without the sober elegance of the little homes in Kenya.

We soon reach a better track on which we notice the traces left by cars. By nine o'clock we are on a good road. Tanga should now be only twenty-five miles away.

To our great astonishment Rabaud's car leaves the road and gently inclines over the edge of a ditch; its driver, now happy and at his ease at being again on a good road, has gone to sleep. The steel cable, our inseparable friend when we come to grief, is hooked on, and in a few seconds the Silver Crescent helps its sister car to extricate itself from its plight.

At about midnight we are crossing a plain broken by occasional clumps of coconut trees, beyond which we catch sight of a glittering expanse in the distance, illuminated by the moon. A lighter breeze begins to blow, bringing with it the scent of the sea, which we have not seen in the many long months since leaving the Mediterranean. The wind is bringing us the breath of the Indian Ocean from its white bosom gleaming in the night.



Arrival of Georges-Marie Haardt and his party at the Indian Ocean

A few hours earlier, farther to the south, two white cars also reach the ocean. They are sisters to our own. While the others, this same night, are pursuing their course to Mozambique and the Cape.

Again we experience the strange contrasts presented by Africa; after the difficulties surmounted that afternoon, through the savanna and tall grass, here we are on the terrace of a modern hotel, where we remain contemplating the Indian Ocean till four o'clock in the morning.

Yesterday we left Tanga to go up to Mombasa.

The previous evening bounteous hospitality was offered us by the English colonists in their homes.

The houses are surrounded with wire gauze and look like cages. It is a land of mosquitoes and bad water. The heat is oppressive, and there is not a breath of air. Throughout the evening we hear the ceaseless buzzing of insects.

On leaving, three friends on motorcycles escort us; they will accompany us till lunch time; after that we shall be on a good road on the borders of Kenya, which we shall again be entering.

During the first few hours we are rolling on a good track through coconut trees. Only one bridge gives us any uneasiness on account of the weight of our cars, although we have lightened them as far as possible before crossing. We accomplish this to the sound of sinister cracking, happily drowned by the hurrahs of our English friends, who are always keen on anything of a sporting nature.

In the evening, after going through stony ravines, thickets of spiky but not very dense bushes, and monotonous scenery without any sign of life or animals, night overtakes us in a region of rather high hills, in fact almost small mountains. We get on to a bad track which, at about ten o'clock at night, breaks off suddenly in front of a fairly broad river. On climbing a slight elevation we can distinguish

the lights of Mombasa, twenty miles away. We make a difficult half-turn.

Black forms pass in front of our lights; we overtake some natives, but our boy does not speak the language of the country. By the aid of gesticulations the natives make us understand that they will go and look for a black man who will be able to make out what we want to know. After waiting an hour, during which time we have our supper, the black man arrives. He stammers, and then a long comical palaver takes place in three different languages.

Late in the night we again find a good track. After going through different adventures and a sleepless night, our two hours' rest being badly disturbed by an invasion of red ants, which nearly devour us, we arrive at daybreak at the house of the senior commissioner of Kwale, where an excellent breakfast in a pleasant room compensates our fatigue.

Two chained leopards are playing about on the green grass. There are flowers around us, and on the horizon we can see the sea and Mombasa.

At eleven o'clock we are on the edge of the arm of the sea separating the Island of Mombasa from the continent.

May 18—The Dumbea has arrived. We again mount our cars for the last stage on African soil. The Silver Crescent and the Sun on High are going down the big avenue shaded by coconut trees, leading to the port.

Here are our two white cars on the quay, in the midst of black engines, trucks and powerful cranes. In the distance the fine lines of an English cruiser—symbol of British power throughout the world—are outlined on the deep blue sea.

Where are now the sand dunes and the forest? Where is now all the poetry of the Dark Continent we have crossed? However, what we now see beneath the scorching and powerful sun on the coast still possesses its poetry, the poetry of the future, the poetry of mechanical power.

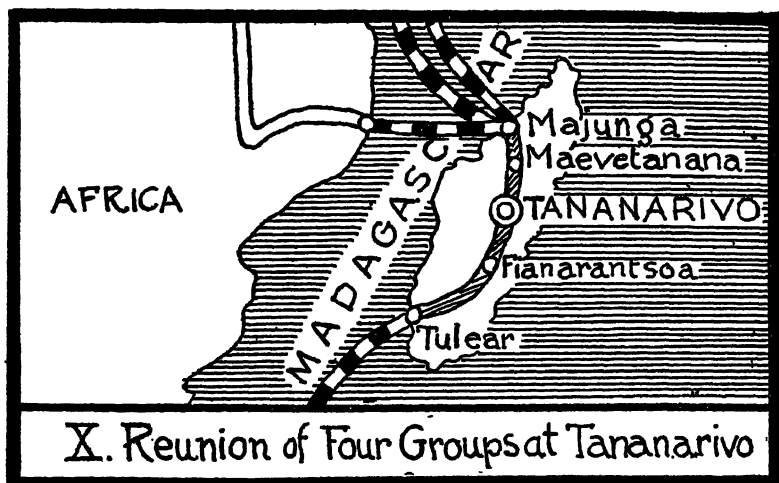
And then are enacted before our eyes the last scenes in

THE BLACK JOURNEY

the romance of the Silver Crescent and the Sun on High. While the black cranes are lifting up our two white cars amid dense smoke, the cars seem to make an almost human gesture, as if begging to remain on land. Swaying in the air to the creaking sound of chains, the wheels with their encircling bands of rubber strive desperately as if in a last attempt to extend themselves again over the soil of Africa.

The Dumbea sails in the afternoon. Some English friends wave us an *au revoir* from a small boat rocking in the swell. In the bow stands a woman; she has exchanged her campaigning costume for a white dress; she waves a little flag, the banner from one of our cars, scorched by the sun and tarnished by the rain, our last homage to Kenya, the fairest and youngest of British East African colonies.

Mombasa is disappearing from our sight in a light and warm mist as we go forth to the green Comoro Isles and the red-tinted shores of Madagascar.



X. Reunion of Four Groups at Tananarivo

THE first three groups, transported by steamer from the African coast to Majunga, took the road to Maëvetanana and Tananarivo, where they arrived on June 26, 1925.

A few weeks later the fourth group landed at Tulear and passing through Fianarantsoa arrived at the capital of Madagascar.

These itineraries had accomplished the communications from different points, the idea of which Marshal Galliéni had outlined when taking over the organization of the Grande Ile.

Thus terminated the second Haardt-Audouin-Dubreuil Expedition after traveling nearly 17,500 miles across Africa, showing what may be expected from the automobile as a means of penetrating the Dark Continent.

Chapter X—Tananarivo, June 26, 1925

MADAGASCAR.

THE steamer going out of its course by the courtesy of the Messageries Maritimes to pick us up on the African coast, is now cutting with her stem the deep blue of the Indian Ocean.

A few light clouds are massed over a point in the sky, indicating the presence of land still invisible. Soon beneath them appears a long misty line on the horizon—the coast of Madagascar.

It is never a matter of indifference when one is approaching the end of a long journey; now, the *Grande Ile* is more than the end of our efforts; it is the object achieved. And so it is with emotion that we endeavor to make out the outlines of what to us is an unknown land, as the boat draws near to a new shore.

We are opposite to Majunga.

At the mouth of the Betsibuka, its water tinged with red, Caïman Point looks like a fierce saurian lying on the sand. To the left a few white houses are dotted over a green hill. To the right is a very low-lying coast, where, here and there, amid the vegetation, the earth looks rose-pink, like the color of human flesh.

Slowly the boat enters the estuary of the river, the large delta of which is rolled down, between islands covered with mangroves, the red soil brought from the distant mountains of Imérina at the foot of which we shall reach Tananarivo in a few days.

We cast anchor. A boat puts off from the land contain-

ing representatives of the governor general, and of the administration of Majunga, who have come to meet us. The oars rise and fall smartly; in the stern the tricolor is floating. Soon the boat comes alongside, and we are greeted in a most cordial manner.

After a last farewell to the captain of the ship, his staff and crew, who had received us in such a friendly manner, we leave the Maréchal Galliéni.

At Majunga the expedition is re-formed. There are still only three groups, as Brull's, the fourth, coming from the Cape, will arrive at the Madagascar coast at Tuléar, on the south, at a later date.

There is no road from Majunga to Tananarivo, neither is there one from Tuléar to Tananarivo.¹

From Majunga we shall have to get to Maevatanana, where a beginning has been made in the bold turnings in the route constructed along the crest, by the corps of military engineers at the time of the pacification.

The first and second groups, having already made a stay of some weeks at Majunga, have been able to collect all the useful information available. And so, on the arrival of the third group, refusing the hospitable invitations of officials and colonists, we start off again for the last stages across the land of the Sakalaves.

Our first impression is a complete contrast to the African scenes still fresh in our minds. The Strait of Mozambique, the depth and narrowness of which make it appear like a dividing line, strikes us, in very truth, as a wall of demarcation between two worlds.

In the central regions of Africa we have just traversed,

¹Through the energetic initiative of Governor General Olivier, the tracks surveyed or traced by our caterpillars have since been put in order. From now onwards it will be possible to go by automobile from Tananarivo to Tuléar. As regards the route between Majunga and Maevatanana, necessitating many skilful operations, this is already in course of realization.

we found Nature holding full sway over primitive humanity. Exuberance is the law of the forest, and strife is the condition of life—strife against vegetation, wild animals and men. Africa is the land of giant trees and fierce passions; Madagascar, at first sight, appears to us an island of softened nature and slumbering emotions.

A poetic hypothesis suggests that Madagascar is a piece broken off from the former continent of Lemuria, which, extending as far as the Malay Islands, has sunk down to the bottom of the ocean, engulfing in the cataclysm of an appalling deluge a superior humanity, of a less savage nature.

Even if men of science do not always go so far as poets, they often travel along the same road; and we must admit that their scientific observations bring out the existence of geological, zoological, and botanical analogies between Malaysia and Madagascar as striking as are the differences we notice existing between Madagascar and Africa.

Here there are no wild animals or poisonous snakes; even the monkeys are replaced by four-footed animals with pointed muzzles, thick fur and slow movements, called lemurs. There are many birds of brilliant colors, wonderful butterflies, and enormous spiders from which silk is spun. The only animal they have in common with Africa is the crocodile. We killed twenty-two on the Marovoay.

There are no hippopotamuses, elephants, rhinoceroses, or even antelopes or gazelles. The fiercest four-footed animal is as large as a polecat, and is carnivorous; its name is pronounced "fouss" (from the English fox), but this animal is a terror only to poultry.

There are found in a fossil state the *Æpyornis*, possibly the ancestor of the ostrich, and a kind of herbivorous animal the bones of which recall those of a small hippopotamus; but these vestiges from prehistoric times do not alter the conclusion formed from zoology: Africa and Madagascar are two countries of a different evolution.

Regarding the idea of a cataclysm, the geological aspect of the island certainly confirms this. The country of the Sakalaves, which we cross in going from Majunga to Maevatanana, is a formation of sediment which has come down by process of erosion from the mountainous regions in the east. Even at this present time the process is continuing.

The Betsibuka and the other rivers in the island keep adding by their alluvial deposits to the sedimentary lagoon which has formed to the west of the volcanic chain, wherein are still seen traces of great seismic upheavals.

We are advancing toward this chain over alluvial plains, marshy in places, the monotony of which is but little relieved by a meager vegetation.

The Sakalave himself also seems to us an "alluvial" man; that is, he has been formed from the deposits of all sorts of distant races. He is made up of the Bantu, the Indian, the Arab and the Hova—a mongrel and obviously Negroid.

In spite of a few difficult crossings over swampy ground, in two days we reach Maevatanana, lying at the foot of the heights forming the framework of the island.

Maevatanana is only separated by a few miles from Suberbieville, where a center of prosperous colonization has taken the place of General Duchesne's camp.

The first gold mines discovered in Madagascar are in the neighborhood of Suberbieville; one of them is still being exploited.

Gold is not the only mineral wealth found in the island; there is also lead, crystallized graphite, and pure quartz capable of being put to many uses in industrial enterprise, there is also lignite, carboniferous peat, and bituminous sandstone. The presence of mineral oil and coal has also been noted, and carbonate of chalk is present in a nearly pure state. We must not forget to mention radioactive minerals—in particular uranium—mica and precious stones: beryl, tourmaline, corundum, opals and topazes, splendid

specimens of which we have the opportunity of admiring at Tananarivo.

We rise rapidly on the excellent route leading from Mae-vatanana to Tananarivo; the country then begins to change its character, or rather it assumes a new one: it is Imerina, the country of the Hovas.

The vegetation almost totally disappears, the jagged mountains are covered with immense prairies on which herds of humpbacked oxen are grazing. Here and there brick houses with sloping roofs appear like dolls' houses amongst the cypress and agave trees; in the hollows of the valleys stretch fields of rice, bubbling mountain streams come rushing down, and along the roads are scattered villages.

In the farm-yards, pigs, turkeys and chickens live in medieval filth. The inhabitants are clothed, as a rule, in the white cotton *lamba*, thrown over the shoulder like the Argentine poncho, and they wear straw hats reminiscent of Bernardin de Saint-Pierre. Their skin is yellow, and their eyes are almond-shaped. Their smile, their reserve and politeness, surprise us; the enigmatic expression of the "ramatoa" (women) is in striking contrast to the simple unpolished charm of African beauties.

Throughout the day we have a fleeting vision of a new country. Even the light seems changed; the sun is paler and throws darker shadows.

When we reach the amphitheater of ground near Ankasobe, the mountains appear violet in the cool twilight. It is night when we halt at Ambohidratrimo.

Then, in the distance, gleaming too low to be stars, we see lights—the constellation produced by a large town, which our eyes, accustomed to look at the humble fire in front of huts where we camped during our nights in Africa, contemplate with startled surprise.

It is Tananarivo, the name of which signifies "the village of a thousand houses."

THE VILLAGE OF A THOUSAND HOUSES.

The sun is rising in a sky of unchangeable blue, and nothing will be lacking to this 26th of June to make it a day of rejoicing.

When we leave Ambohidratrimo an inquisitive crowd is thronging about our cars. In the streets of the beflagged village the white *lamba* form two compact lines which are to be prolonged almost uninterruptedly through the whole of the fifteen kilometers separating us from Tananarivo.

From every village in Imerina the Hovas have come to see the cars, the approaching arrival of which had been announced several months ago.

Every native governor welcomes us with a speech, accompanied by the rolling of drums and beating on wooden boxes. From the translations of these speeches which are handed to us, we find they are embellished with numerous Chinese metaphors borrowed from the folklore of the Far East.

The imagination of the Hovas has given to our caterpillars a supernatural origin.

We halt at the entrance to Tananarivo; a dense crowd throngs around our cars with every evidence of cordial friendliness. And this is only our first stop. In front of us is a broad avenue lined by countless *lamba* between which we mount up to a monument, which has been attracting our notice from a distance; it is the statue of Marshal Galliéni, the peacemaker of the island, whose genius has everywhere left its mark and whose memory everyone holds in reverence.

We bow in homage before the memorial to the man to whom Madagascar owes its beginning as a portion of France in South Africa.

Galliéni is more than a great man to us, more than a great idea; he embodies a great sentiment, the sentiment of one's fatherland.



Tananarivo



After having traversed so many different lands, become acquainted with so many different races, seen so many scattered tribes powerless to emerge from a state of infancy on account of their very diversity, how should we not feel with fervor that the starting point of the strength of a people, and consequently of its progress, is an unswerving unity, not of interests which may change from day to day, but of those which are grouped round an intangible ideal made up of common memories and joint efforts?

Surrounded by his colleagues, Governor General Olivier welcomes us on the steps of the Residency.

After that, numerous receptions surround us with an atmosphere of unbroken cordiality. Tananarivo fêtes us with cheerful bonhomie; under a clement sky, it is a pleasant town full of charm—a quite special charm with its attractive Creole atmosphere; moreover, is not modern Tananarivo a daughter of France born under the sky of Imerina?

We have here the palace of the queen, as simple as a child's toy, the tomb of her prime minister, the holy city of Ambohimanga, in fact all the souvenirs of the past—but how greatly overshadowed by the realities of the present in the form of electricity, banks, shops, schools and churches!

New times have come, and on the horizon of old Imerina, unchanged since the primeval cataclysm petrified its outlines, it seems that progress has traced vertical lines for her signature, consisting of the tall posts of wireless telegraphy, the waves of which extend as far as Paris.

At this very moment, perhaps, a message announcing our return to Paris may be passing thither in the twilight now falling over the gleaming water of the rice-fields.

And returning for a few moments with the flying ether waves over the regions traversed during ten months of effort, our thoughts review our long journey through the sands, savanna and forests of this wonderful Africa, extending us a farewell hand and pointing to the future it longs to embrace.

And memories come thronging over us while all the world is sleeping. . . .

Paris . . . the whirring of the factories where the expedition was prepared . . . Colomb-Béchar . . . the eight cars leaving the oasis in pursuit of their great adventure . . . the scorching stretches of the desert . . . the Niger . . . the black Sultanates . . . Tchad . . . the fetishists . . . the sorcerers . . . primitive humanity . . . the savanna, the kingdom of wild animals . . . the forest, that last prehistoric retreat . . . the days of hard struggles when everything seemed to be arrayed against us—the sand, the burning sun, the rain, the mosquitoes, the thick mud of the marshes . . . then days of feverish expectation . . . finally the days of infinite joy . . .

These were wonderful hours we shall never forget, but shall never live over again, not only because time never goes back, but also because the Dark Continent, now penetrated from every side, has been captured by storm and progress.

The mystery of Africa is soon to end.

Our white cars have only been the advance guard; the faithful worshipers of Boula-Matari were not wrong in believing them to be heralds of a new era. The old world is suffocating: in its conquest of space it is annihilating distance—and also the charm of the unknown.

THE END.

APPENDIX

APPENDIX

SECOND GROUP: COMMANDANT BETTEMBOURG.

Tabora to Dar-es-Salaam.

The entire itinerary of this group was through Tanganyika territory, formerly German East Africa.

Leaving Tabora on May 1, Commandant Bettembourg and his companions reached by a good track, without meeting any difficulties, the village of Witi, fifty-two miles distant.

On May 2, it was easy going in the direction of Zekenke. The group passed through a region of sandy savanna where they saw many wild animals—gnus, gazelles, giraffes and zebras. A few specimens were shot for the zoological collection. Difficulties began in the evening on reaching the valley of Wembéré, eighteen miles from Zekenke.

This valley is extremely marshy. They had to make roads by laying down branches of trees in several places, and Zekenke was not reached until the evening of next day, May 3.

At Zekenke the Germans had installed, under very efficient conditions, electric machinery and crushing apparatus for treating the gold ore. The English have not continued this work.

Leaving Zekenke on May 4 the group was obliged to utilize a mountain path in climbing the granite slopes at the top of which the Magori live. Going down again to the lakes of Siginda, Commandant Bettembourg found himself on a sandy soil like that which the Audouin-Dubreuil group encountered in the valley of the Pangani River.

Next day they arrived at Kondoa-Irangi, three hundred and twenty miles from Tabora.

Kipaya was reached on May 6, after crossing plains where herds of ostriches were seen. Bergonier noticed a white giraffe—a strange example of albinism.

The natives of this region, called “Moran,” show the same effeminate characteristics as the Kikuyu and the M’Gogo, which observation was also noted by both the first and third groups.

After making relatively easy progress the Bettembourg group arrived on the evening of May 8, at Handeni, which is surrounded by large plantations of rubber trees now entirely abandoned.

According to observations made by the other groups, the same is the case throughout the Tanganyika Territory. It is difficult to see why this natural wealth is not exploited, and why the English do not follow up the remarkable results obtained by the German colonists.

This also applies to the roads, which, numerous and well kept up in former times, have now actually disappeared beneath the rapid growth of the vegetation. The second group could not find any trace of the road that used to go from Handeni to Bagamoyo on the Indian Ocean.

This last part of the journey was particularly difficult, especially after leaving Turiani.

The crossing of the Warmi River necessitated the putting together of a bridge of logs, sixty-two yards in length, over a swift current in which the water reached in some places a depth of twenty feet.

Another not less dangerous obstacle confronted the second group when crossing the Ruvu. The bridge threatened to collapse owing to its dilapidated condition, and it became necessary to cross the marshy bed of the river, in which the cars almost completely sank.

Notwithstanding these difficulties experienced toward the

end, the Bettembourg group reached the Indian Ocean at Bagamoyo on the evening of May 13.

It then followed the coast, sometimes along the sand of the shore, and sometimes inland over sandy ground, passing through spiky bushes and coconut trees. It arrived at Dar-es-Salaam at 5 P. M. on May 14, 1925.

FOURTH GROUP: CHARLES BRULL.

Tabora to Capetown.

After reaching Albertville from Tabora by crossing Lake Tanganyika, Brull's group took the direction of Elisabethville to the southeast, counting on being able to utilize the system of roads marked out in Katanga (Belgian Congo) to effect a speedy advance.

But after the twentieth of May Brull and his companions realized that this alleged system of roads consisted only of a few tracks and native paths.

They had to cross marshes, and on May 2 the first river they encountered, the N'Goulé, stopped them. They crossed it, however, by making a bridge, and reached by way of Musoloi and Chilongo the district which depends upon the mining works run by the flourishing company constituted by decree of King Leopold on October 23, 1906; by its untiring activity it has made Katanga into a great industrial province.

The Katanga copper works are among the richest in the world. Radium and uranium are also found in this wonderful country.

The first works visited by Brull were those of Panda, the center of which is the town of Likasi.

After this, no other difficulty was encountered and they reached the capital of the country, Elisabethville, which the enterprise of Belgian industry has built up within a few years.

Elisabethville now has its theater, hotel, large shops,

banks, sporting grounds, even its dancing and concert halls, at which several philharmonic societies take turns in performing.

Leaving Elisabethville on May 29, the group, passing over mountain routes, reached the high regions of Rhodesia, the frontier of which it crossed on May 30.

When on English territory Brull's group noted a complete absence of roads, a fact which was observed elsewhere by the other groups forming the expedition. This group met with great difficulties before reaching Broken Hill on June 4.

They crossed the Kafue by the railway bridge, and on the farther side the group met the Court Expedition which had left Capetown to go to Cairo by automobile. This expedition must have encountered stubborn obstacles over ground so heavily bogged by the rains.

Rhodesia is a country of cattle-raising; there are many farms, much marshland, and great bare plains where the herds graze. The country, for the most part, is occupied by former English officers who settled there after the Transvaal war.

There was no road and often not even a track. The group took six days to reach Livingstone on the Zambezi, where it had to remain for some days because Brull was laid up by an acute attack of malaria.

Not far from Livingstone are the falls of the Zambezi, or the Victoria Falls, the size of which is far greater than that of Niagara Falls.

Beyond the Zambezi, there are likewise no roads, but the nature of the soil changes; sand makes its appearance and with it a thorny savanna reminding one of that in the Sudan. It is still a country of stock-raising and agriculture. Orange, lemon, and mandarin trees grow at the bottom of the valleys; on the slopes spread fields of wheat, barley and oats; there are also plantations of maize and tobacco, and

fine market-gardens, where all the vegetables to be found in Europe grow in abundance. Owing to its altitude the climate is really that of a perpetual European summer.

On July 19 the cars of the fourth group descended to the coal-bearing basin of the Wankie mines. This coal bed is estimated to contain six thousand million tons of good quality coal.

Continuing his descent to the south, in very hard stages across the country of the Kafirs, Brull did not find a road until he was near Buluwayo, which he reached June 28.

This town, which looks like a large American city in the West, was gaily beflagged for the arrival of the Prince of Wales. The prince, to whom they were presented, together with their cars, was kind enough to assure Brull that he had followed with the greatest interest the vicissitudes of the expedition throughout its journey.

Not far from Buluwayo, on the Matoppos Hills, lie the bodies of Cecil Rhodes and Dr. Jamieson, who carried out his most audacious plans.

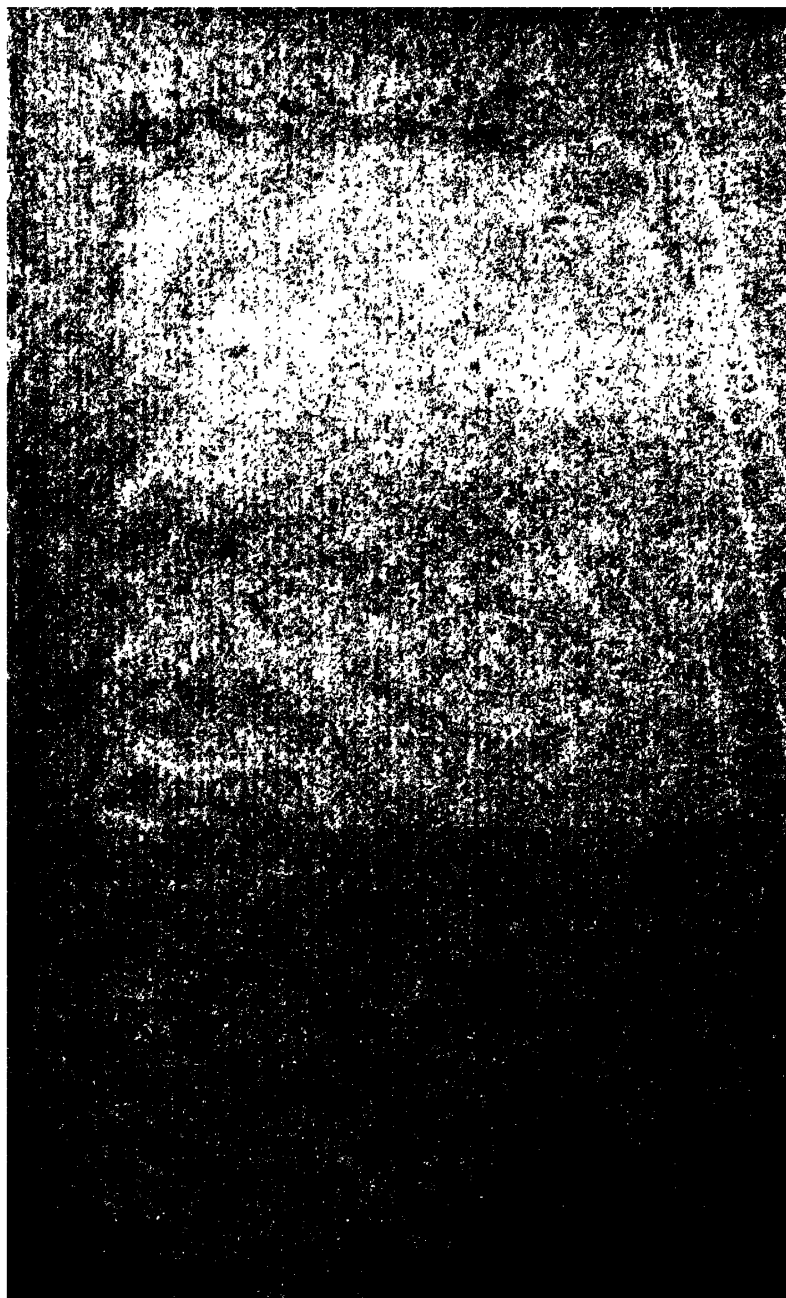
Cecil Rhodes, the founder of the Union of the States constituting South Africa, must be considered one of the greatest and most successful pioneers of modern times. His iron will and great patriotic ambition, deserve the admiration of even those who cannot approve, without reserve, all the means he employed to carry out his ends. Characters such as his are beyond the judgments made by the common rules of morality; they can only be judged by the measure of their own greatness.

Leaving Buluwayo, on July 6, Brull's group entered the Transvaal after skirting the desert steppes of Kalahari. From thence onwards he found good roads to Kimberley, the diamond city.

Between Kimberley and Capetown automobiles can run without any difficulty.

South Africa is as precious a jewel as the territory of

North Africa. The climate is temperate and the soil fertile, and it was after passing through cultivated and charming country that Brull's group reached Capetown on August 1, 1925, having traveled more than three thousand miles since leaving Tabora.



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